SONY

KV-C2961D/A

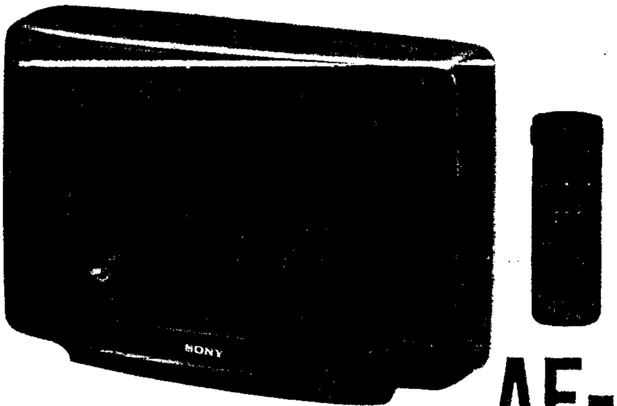
MODEL

SERVICE MANUAL

KV-C2161D/C2561D/C2961D
RM-816

SERVICE MANUAL

AEP Model
KV-C 2161 D
Chassis No. SCC-F 07 K-A
KV-C 2561 D
Chassis No. SCC-F 07 F-A
KV-C 2961 D
Chassis No. SCC-F 07 E-A



AE-1C CHASSIS

MODELS OF THE SAME SERIES	
KV-C2161D/C2561D/C2961D	
KV-C2551D/C2951D	
KV-X2551D/X2951D	

SPECIFICATIONS

【KV-C 2161 D, KV-C 2561 D, KV-C 2961 D】

Television system	B/G/H
Color system	PAL, SECAM, NTSC3.58, NTSC4.43
Stereo system	GERMAN stereo
Channel coverage	VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S 01-S 05, M 1-M 10, U 1-U 10
Picture tube	HI-Black Trinitron tube Approx. 54.5 cm (21 inches) (KV-C 2161 D) (Approx. 51 cm picture measured diagonally) 100 ° degree deflection Approx. 63.5 cm (25 inches) (KV-C 2561 D) (Approx. 59 cm picture measured diagonally) 110 ° degree deflection Approx. 72.4 cm (29 inches) (KV-C 2961 D) (Approx. 68 cm picture measured diagonally) 110 ° degree deflection

Inputs / Outputs Terminals

REAR

-⊖ 21 pin Euro connector (CENELEC standard)	-Inputs for audio and video signals -Inputs for RGB -Outputs of TV video and audio signals
⊖-2/-⊖21-pin Euro connector	-Inputs for audio and video signals -Inputs for S-video -Outputs for video and audio signals (selectable)
⊖ Audio output(vartable)	-phono jacks

FRONT

-⊖ Video input phono jack

-⊖ Audio inputs (L,R) phono jacks

S-video Inputs-4 pin DIN

Headphone jack : stereo mini jack

-Continued no next page-

MICROFILM

TRINITRON® COLOR TV

SONY®

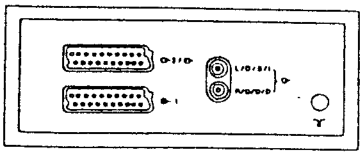
Sound output	15 W + 15 W
Power consumption	87 Wh (KV-C2161D) 101 Wh (KV-C2561D) 108 Wh (KV-C2961D)
Dimensions	Approx. 645×433×495 mm (w/h/d) (KV-C2161D) Approx. 720×497×480 mm (w/h/d) (KV-C2561D) Approx. 814×558×508 mm (w/h/d) (KV-C2961D)
Weight	Approx. 25kg (KV-C2161D) Approx. 38kg (KV-C2561D) Approx. 52kg (KV-C2961D)
Supplied accessories	RM-816 Remote Commander (1) IEC designation R6 batteries (2)

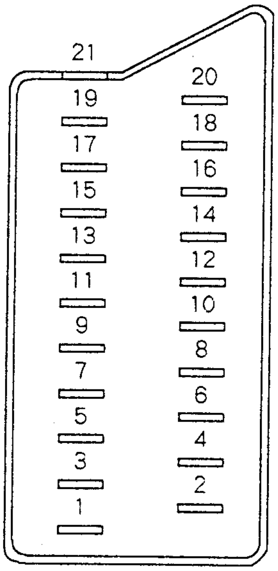
【RM-816】

Remote control system	infrared control
Power requirements	3V dc 2 batteries IEC designation R6 (size AA)
Dimentions	Approx. 75×221×23mm(w/h/d)
Weight	Approx. 230g (including batters)
Accessories supplied	IEC designation R6 batteries (2)

Design and specifications are subject to change without notice.

21 pin connector (⊡1 ⊕2)





Pin No	1	2	4	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5Vrms Output impedance : Less than 1kohm *
2	○	○	○	Audio input B (right)	Standard level : 0.5Vrms Input impedance : More than 10kohms *
3	○	○	○	Audio output A (left)	Standard level : 0.5Vrms Output impedance : Less than 1kohm *
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5Vrms Input impedance : More than 10kohms *
7	○	●	●	Blue input	0.7 ± 3dB, 75ohms, positive
8	○	○	○	Function select (AV control)	High state (9.5 – 12V) : Part mode Low state (0 – 2V) : TV mode Input impedance : More than 10kohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7V ± 3dB, 75ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground (blanking)	
15	○	-	-	Red input	0.7V ± 3dB, 75ohms, positive
	-	○	○	(S signal) croma input	0.3V ± 3dB, 75ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1 – 3V) Low state (0 – 0.4V) Input impedance : 75ohms
17	○	○	○	Ground (video output)	
18	○	○	○	Ground (video input)	
19	○	○	○	Video output	1V ± 3dB, 75ohms, positive Sync : 0.3V (– 3, +
20	○	-	-	Video input	1V ± 3dB, 75ohms, positive Sync : 0.3V (– 3, +
	-	○	○	Video Input/Y (S signal)	1V ± 3dB, 75ohms, positive Sync : 0.3V (– 3, + 10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● unconnected (open) * at 20Hz – 20kHz

4 Pin connector (⊟)

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75ohm, positive Sync 0.3V $^{-3}_{+10}$ dB
4	C (S signal) input	0.3V ± 3dB 75ohm, positive

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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING !!

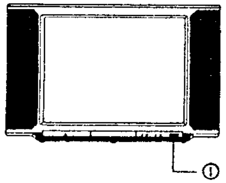
COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

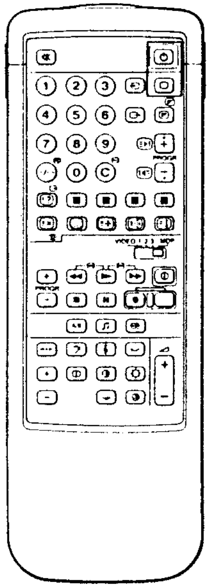
SECTION 1
GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remein as in the manual.

1-1. SWITCHING ON/OFF

After you have completed the basic preparation your TV is ready to be connected to the mains power supply (220/240V AC, 50Hz).





How to turn the TV on

Action	Result
Press ⏼ on the TV.	The TV will turn on. **Note:** If the screen remains blank, the TV may be in the standby mode. Press ▢ or any number button on the commander to switch it on.

How to turn the TV off

A Temporarily	
Press ⏻ to enter standby mode.	The TV will be in standby. To return to the TV mode press ▢
B Completely	
Press ⏼ on the TV.	The TV will turn off.

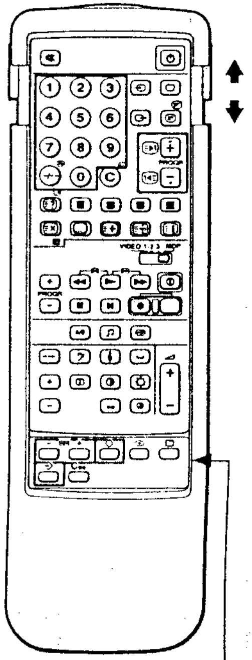
1-2. PRESETTING

After you have installed this TV you need to preset TV channels.

TV stations broadcast their channels at certain frequencies. You must preset these channels to programme numbers on this TV before you can watch the TV programmes.

There are 60 spaces for storing these channels.

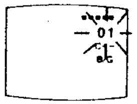
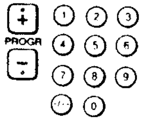
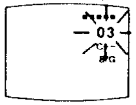
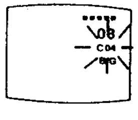
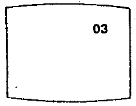
Slide open the full function side of the remote commander to reveal preset buttons.

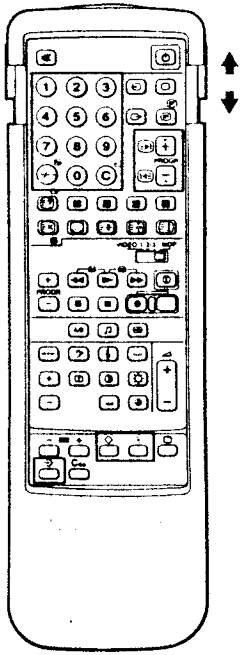


Note: These buttons should be used in preset mode only.

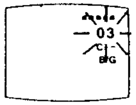
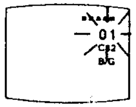
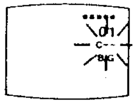
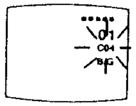
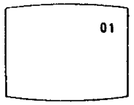
How to preset channels automatically

If you are unfamiliar with the channel numbers of the stations you wish to preset, use "How to preset channels automatically". If you are familiar with the channel numbers refer to "How to preset T.V. channels directly".

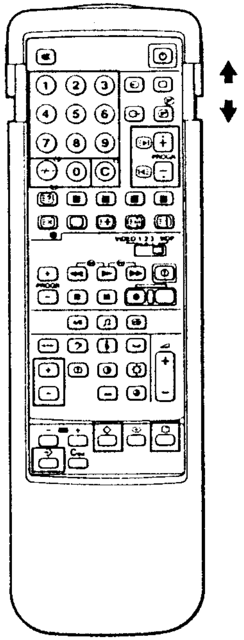
Action	Result
1 Press ⇨ to enter the preset mode.	 The programme number will start flashing.
2 Press PROGR + or - or the number buttons to select the programme number to which you want to preset channels.  **Note** To select a double-digit number, use the -/-- button. For example, if you want to choose 23, press -/--, 2, and then 3.	 The programme number changes
3 Press ⊞ + or - once to search forward or backward for channels.	 When a channel is tuned in, the search will stop. **Note** If you want to skip a channel, press ⊞ + or ⊞ -.
4 Press ◇ if you want to store the channel which is tuned in. Press ⇨ to exit preset mode without storing.	 The channel is now stored and you have returned to TV mode.
5 Repeat steps 1 to 4 to store the other channels.	



How to preset channels directly

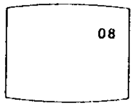
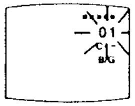
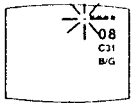
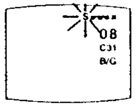
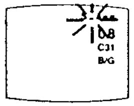
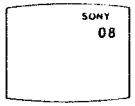
Action	Result
1 Press ⇾ to enter the preset mode.	 The programme number will start flashing.
2 Press PROGR +/– or the number buttons to select the programme number on which you want to preset a channel. PROGR + – 1 2 3 4 5 6 7 8 9 -/-- 0 **Note** To select a double-digit number, use the -/-- button. For example, if you want to choose 23, press -/--, 2, and then 3.	 The programme number changes.
3 Press C. If you want to select a cable channel, press C twice. C	 The indication "C--" ("S--" for a cable channel) starts flashing on the display.
4 Select the channel number with two digits (e.g. 04) by pressing the number buttons. 1 2 3 4 5 6 7 8 9 0 **Note** Press the second number within 5 seconds after the first one, otherwise the operation will be cancelled.	 The channel number changes. **Note** If you have made a mistake the letter "X" will appear. Repeat step 4 again.
5 Press ◇ to store the channel which is tuned in. Press ⇾ to exit the preset mode without storing.	 The channel is now stored and you have returned to TV mode.

Repeat steps 1 to 5 to store the other channels.



How to Name a Station

You can use up to five characters to "name" a channel or station (i.e. BBC1).

Action	Result
1 Select a programme number you want to name by pressing the PROGR +/– or the number buttons PROGR + – 1 2 3 4 5 6 7 8 9 -/-- 0	 The selected programme number will appear.
2 Press ⇾.	 The programme number starts flashing.
3 Press ▢.	 The first column of the station name indication will start flashing.
4 Press + or – to select a letter in the alphabet, a number, or a blank space. + –	 The letters of the alphabet, numbers and the space ("-") will appear sequentially.
5 Press ▢.	 The first character is now set and the second column will start flashing.
6 Repeat steps 4 and 5 to set each letter.	
7 Press ◇.	 The channel name is now stored and you have returned to TV mode.

How to tune in a channel temporarily

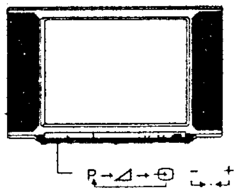
You can tune a channel in temporarily, if it has not been preset.

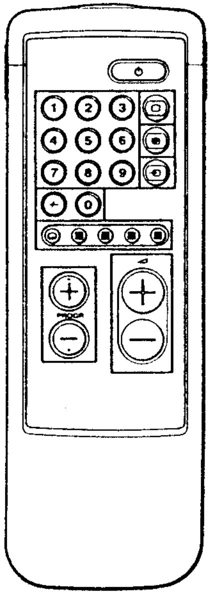
Action	Result
1 Press C. For cable channels, press C twice.	The indication "C" ("S" for cable channels) appears on the screen.
2 Select the channel number with two digits by pressing the number buttons (e.g. for channel 4, first press 0, then 4.)	The channel is received, but it is not stored to any programme number.

1-3. BASIC TV OPERATION

This section introduces you to the basic control functions which are available on the simple side of the remote commander.

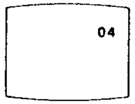
Note: Press ⊥ on door to open.



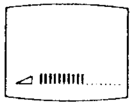


How to Select Programmes

Before you can select programmes make sure that you have preset channels.

Action	Result
Press PROGR +/– or the number buttons. ①②③ ④⑤⑥ ⑦⑧⑨ -/-- ⓪ (+) PROGR (–) To select a double-digit number, use the -/-- button. For example, if you want to choose 23, press -/--, 2, and then 3.	 The selected programme is displayed.

How to Adjust the Volume

Action	Result
Press ◁ + or –. (+) (–)	 The volume markers will appear.

How to Use Additional Functions

How to operate with the buttons on the TV

You can also select programmes and adjust the volume using the P→◁→⊕ and →•← +/– buttons on the front of the TV.
For operation, first press the P→◁→⊕ button repeatedly so that the P (for programme) or ◁ (for volume) indication appears on the screen, and then adjust with the →•← +/– buttons.

How to view the teletext

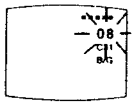
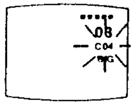
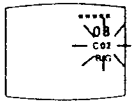
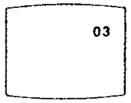
Press ⊜. To return to the TV mode, press ▢.
For details about the teletext operation.

How to view the video input picture

Press ⊕ To return to the TV mode, press ▢. For further details.

How to Skip Programmes

Using the PROGR +/– buttons you can skip unused programme channel numbers. However, the skipped numbers may still be called up using the number buttons.

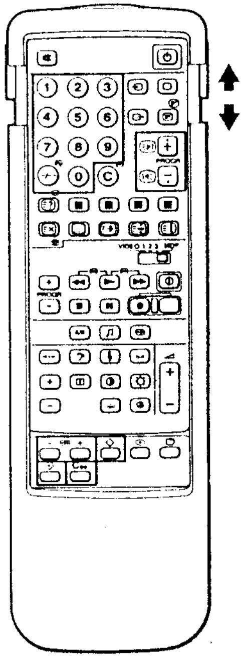
Action	Result
1 Press ⇨ to enter the preset mode. ⇨▭	 The programme number will start flashing.
2 Select the programme number that you want to skip by pressing PROGR +/– or the number buttons. (+) PROGR (–) ①②③ ④⑤⑥ ⑦⑧⑨ -/-- ⓪	 The programme number changes.
3 Press Coo. Coo ▭	 The lowest channel number appears under the programme number.
4 Press ◇. ◇▭	 The channel is now stored and you have returned to TV mode.
Repeat steps 1 to 4 to skip other programme numbers.	

How to Fine Tune Manually

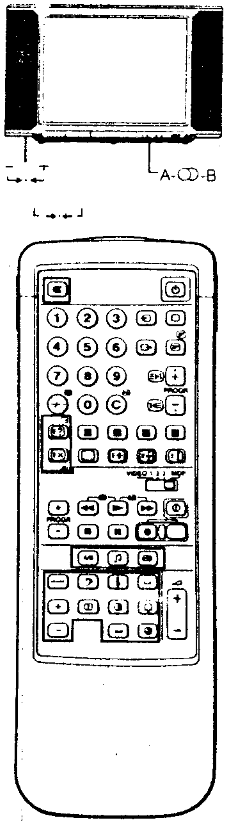
If the picture is distorted, you can fine tune the channel manually.

Action	Result
Press ⊞ + or – repeatedly until the picture looks normal.	The indication ← F → appears on the screen.
Press ⇨ to enter the preset mode.	The programme number starts flashing.
Press ◇.	The fine tuning is stored.

Note: The automatic fine tuning will function again when you preset the channel once more.



1-4. ADVANCED TV OPERATION



This section shows you how to use convenient features and how to adjust the picture and sound to your taste.
Use the full-function side of the Remote Commander.

How to use on-screen display and special sound features

You can enjoy the following convenient features.

How to	Action	To resume normal picture/sound
Display on-screen indications	Press ⊡	Indications disappear after some seconds
Display programme numbers	Press ⊡ twice	Press ⊡ twice again.
Mute the sound	Press 🔇.	Press 🔇 again.
Select a language in bilingual programmes	Press A/B. The selected mode of the A-◯-B indicator on the TV lights up.	Press A/B.
Set the sound to music listening position	Press ♫.	Press ♫ again.
Use the space sound (special acoustic effect)	Press ⊕	Press ⊕ again.
Request the time	Press ◷	Press ◷ again.

How to adjust the picture and sound

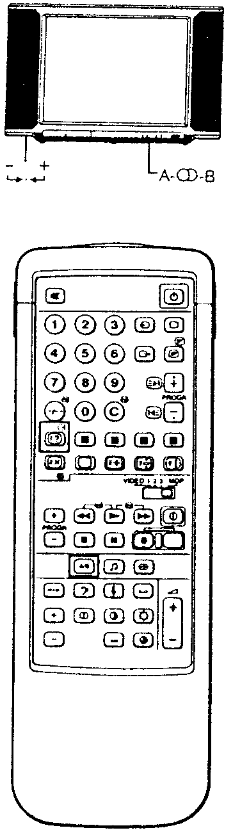
Although the picture and sound have been adjusted at the factory, you might want to adjust them to your own taste. To do this, please follow the steps.

For picture adjustment

To Adjust:	Press:	Then:	Result: (+ ⟷ −)
Picture:			
Colour Intensity	◕	[+] [−]	More ⟷ Less
Picture Contrast	◑		More ⟷ Less
Brightness	☼		Bright ⟷ Dark
Hue (for NTSC only)	♕		Reddish ⟷ Greenish
			Sharp ⟷ Soft
Sound:			
Bass	𝄢	[+] [−]	More ⟷ Less
Treble	𝄞		More ⟷ Less
Balance	⋈		More Right/More Left

To reset the picture and sound to factory set levels press →•←.

On the set:
Press →•← +/- buttons simultaneously.



How to select a NICAM broadcast

This Sony TV has been designed to select Nicam broadcasts when available. Whenever a Nicam broadcast is received, the ⋈ symbol appears briefly on the screen. When the Nicam programme ends, or you switch channels to one without Nicam, the ⋈ symbol appears. To check if the channel you are watching is receiving Nicam, press the on screen display button ⊡, on the full function side of the remote commander.

How to select the sound of your choice

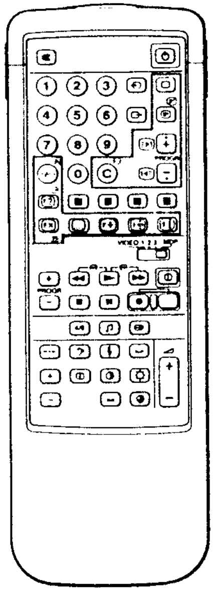
Nicam programmes can be broadcast in three ways. You may select the sound you want to hear in each of these, by pressing the ⊟ button on the full function side of the remote commander.

Nicam service being broadcast	Action	The sound you hear	Indication on the TV A◯B	
Stereo		Stereo	☼	☼
	Press A/B	Normal	▭	▭
	Press A/B again to return to stereo			
Mono		Mono	☼	▭
	Press A/B	Normal	▭	▭
	Press A/B again to return to Nicam mono.			

Bilingual		Language A	☼	▭
	Press A/B	Language B	▭	☼
	Press A/B	Normally broadcast language	▭	▭
	Press A/B again to return to language A			

* Depending on availability of service.

1-5. TELETEXT OPERATION



TV stations broadcast teletext programmes via the TV channels. To receive teletext programmes, use the buttons indicated in green on the full side of the Remote Commander.
With the simple side of the Remote Commander, only the basic operation is possible.

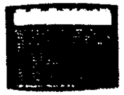
How to View the Teletext

Action	Result
1 Select the channel which carries the teletext service you wish to see.	The channel changes on the screen.
2 Press ⊜.	Teletext will appear. If the teletext signal is not broadcast, then **p100** is displayed.
3 Input three digits for the page number using the number buttons. **Note** If you make a mistake, type in any three digits, then re-enter the correct page number.	The numbers are entered on the screen. The requested page will appear in a few seconds.
To return to the TV mode. Press ○. **To change the teletext channels** First press ○ to return to the TV mode, then repeat steps 1 to 3.	

Note
If the signal of the TV channel is weak, teletext errors may often occur.

How to Use the Advanced Features of Teletext

How to	Action	Result (On-screen display)
Request the index page.	Press ⓘ (INDEX).	The index page appears.
Request the subtitle page (p888).	Press ○.	The subtitle page is displayed (p888).
Access the next or preceding page.	Press ⊕ (PAGE +) or ⊖ (PAGE –).	The next or preceding page appears.

How to	Action	Result
Superimpose the teletext display on the TV programme.	Press ⊜ once if you are in text mode, or press ⊜ twice if in TV mode. To return to the normal teletext display press ⊜ again.	The teletext displays are superimposed on the TV programmes.
Prevent a teletext page from being updated or changed.	Press ⊞ (HOLD). To resume normal teletext reception, press ⊜ (TEXT/MIX).	The HOLD symbol (⊞) appears on the screen and the chosen sub-page is held until you cancel.
Enlarge the teletext display.	Press ⊡ once to enlarge the upper half. Press twice to enlarge the lower half. Press again to restore the normal display.	The upper half is enlarged.
Reveal concealed information (e.g. answers to a quiz).	Press ⓡ (REVEAL). Press again to conceal the information.	 The information is revealed.
Watch the TV programme while waiting for a requested page to be displayed.	**1.** Request a new page.	The numbers are entered.
	2. Press ⊠ (TEXT CL).	The TV program is displayed, and the requested page number and other teletext data appear at the top of the screen.
	3. When the requested page has been captured, the page number remains and the other data disappears.	
	4. Press ⊜ to view this page.	The requested page is displayed.
Have a requested page displayed at a pre-determined time.	**1.** Request a desired page.	The requested page is displayed.
	2. Press ⊙ (TP ON).	"T****" appears at the bottom of the screen.
	3. Enter the time you want to have the page displayed with four digits using the number buttons. (For example, enter 0730 for 7:30 AM.)	The time is entered on the screen.
	4. Press ⊠ (TEXT CL) to watch the TV programme until the requested time.	At the requested time, the page number will be displayed **at the** top of the screen, **to view this** page, press ⊜.
	To cancel the request Display the teletext page, then press ⊗ (TP OFF).	The request is cancelled. To resume TV mode press ○.

Some of the features may not be available depending on the Teletext service.

1-6. OPTIONAL CONNECTIONS/OPERATIONS

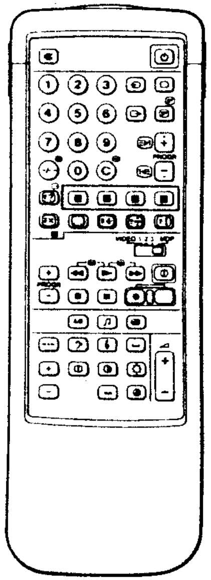
How to use the FASTEXT Feature

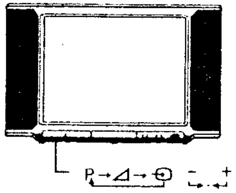
FASTEXT feature allows you to access pages quickly with one key operation.
When a FASTEXT page is broadcast, a colour coded menu appears at the bottom of the screen. Each coloured prompt corresponds to the coloured buttons on either side of your Remote Commander.

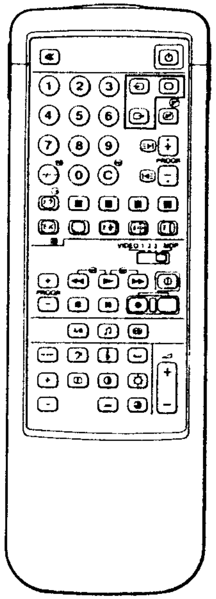
Operation

Action	Result
Press one of the coloured buttons which corresponds to the coloured prompt on the teletext.	The selected teletext page appears.

Note
Correct FASTEXT operation depends on the necessary signals sent from the TV station.







How to view the video input picture

You can view the picture of video equipment connected to the input terminals by selecting the input mode.

Operation

Action	Result	
Press ⇥ repeatedly to select the desired input.	⇥1	Symbol for the selected input appears. (See the table below.)
To return to the TV mode, press the ▢ button.		

Input modes

Symbol	Result
⇥1	Audio/video input through the ⇥ connector.
⇥	RGB input through the ⇥ connector.
⇥2	Audio/video input through the ↦2/⇥ connector.
⇥2	S video input (from a VTR equipped with an S video output) through the ↦2/⇥ connector.
⇥3	Audio/video input through ⇥ and ⇥ jacks on the front.
You can also select the input mode using the P→⊿→⇥ button on the TV. In this case, first select ⇥ and then press +/– buttons to select the input	

How to select the Output

The ↦2/⇥ connector outputs four kinds of audio/video signals. You have to select one of them as follows.

Operation

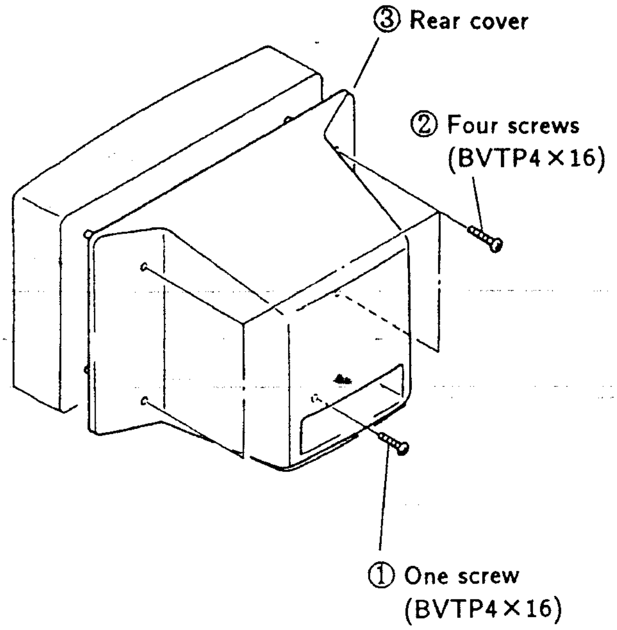
Action	Result	
Press ↦ repeatedly to select the desired input.	1↦	Symbol for the selected output appears. (See the table below.)

Output modes

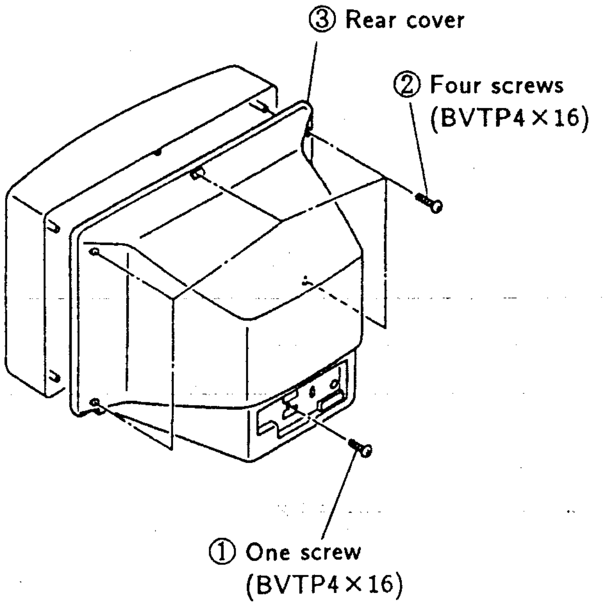
Symbol	Output from
1↦	The audio/video signal from the ⇥1 connector
2↦	The audio/video signal from the ↦2/⇥ connector
3↦	The audio/video signal from the ⇥ ⇥ connectors.
TV↦	The audio/video signal from the Ͳ aerial terminal.

SECTION 2
DISASSEMBLY

2-1-1. REAR COVER REMOVAL (21 inch)

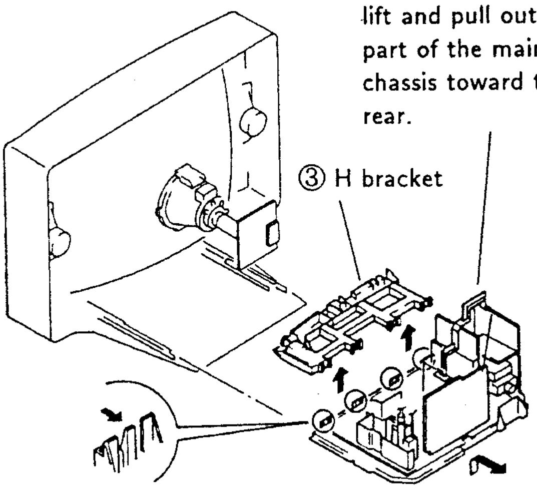

③ Rear cover
② Four screws (BVTP4×16)
① One screw (BVTP4×16)

2-1-2. REAR COVER REMOVAL (25inch, 29inch)


③ Rear cover
② Four screws (BVTP4×16)
① One screw (BVTP4×16)

2-2-1. CHASSIS ASSEMBLY REMOVAL (21inch)

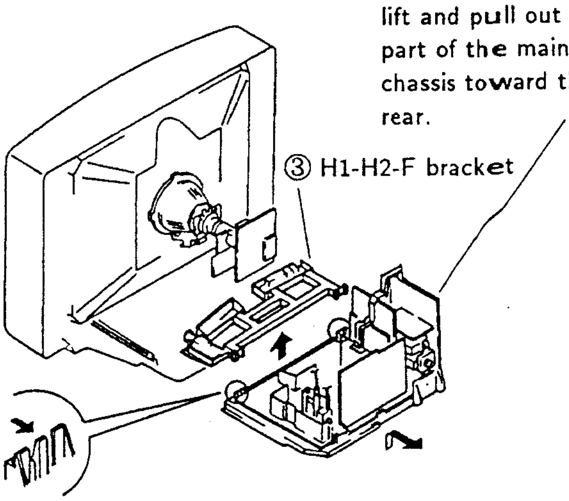
① After the assembly of the main chassis, lift and pull out rear part of the main chassis toward the rear.



② Push the four claws of the main chassis in the direction of arrow and remove the H bracket upwards.

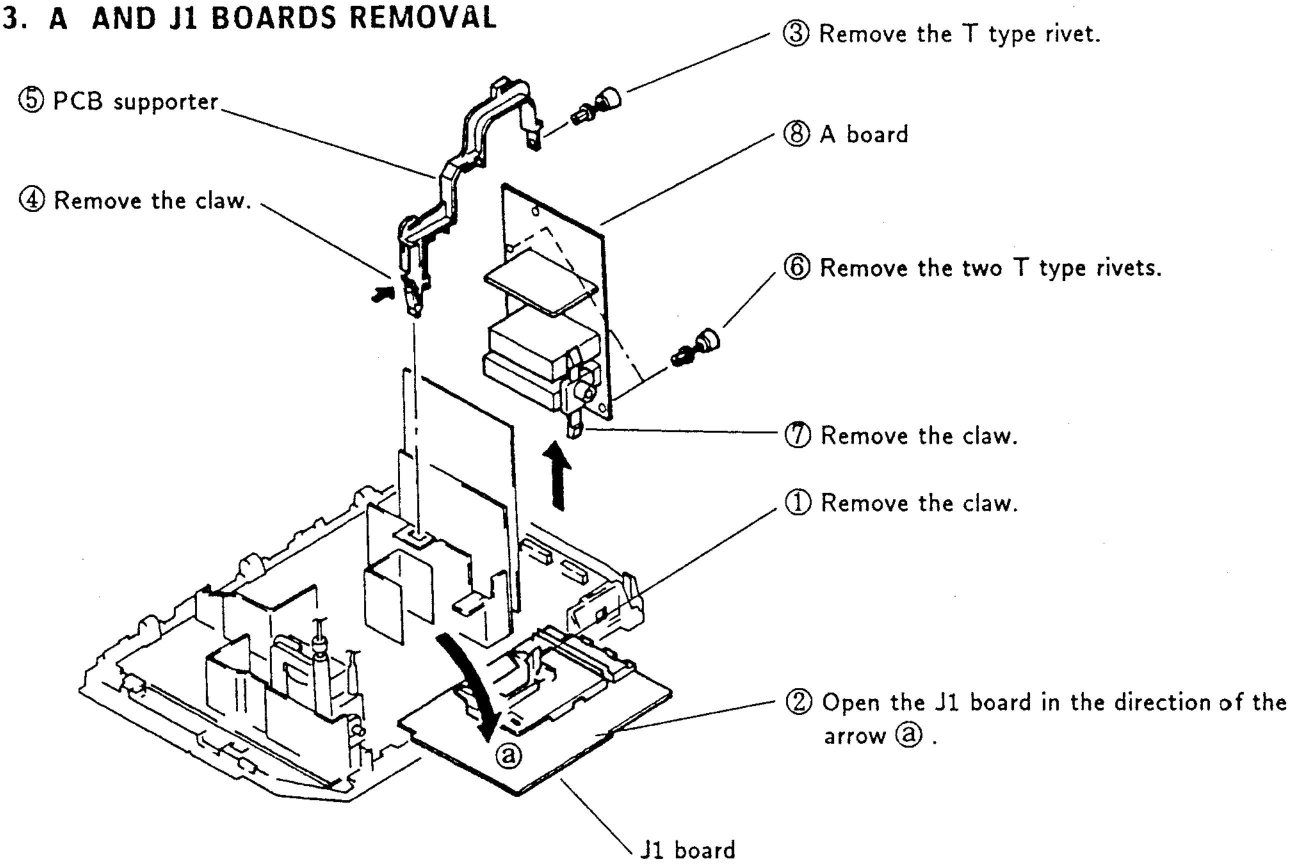
2-2-2. CHASSIS ASSEMBLY REMOVAL (25inch, 29inch)

① After the assembly of the main chassis, lift and pull out rear part of the main chassis toward the rear.

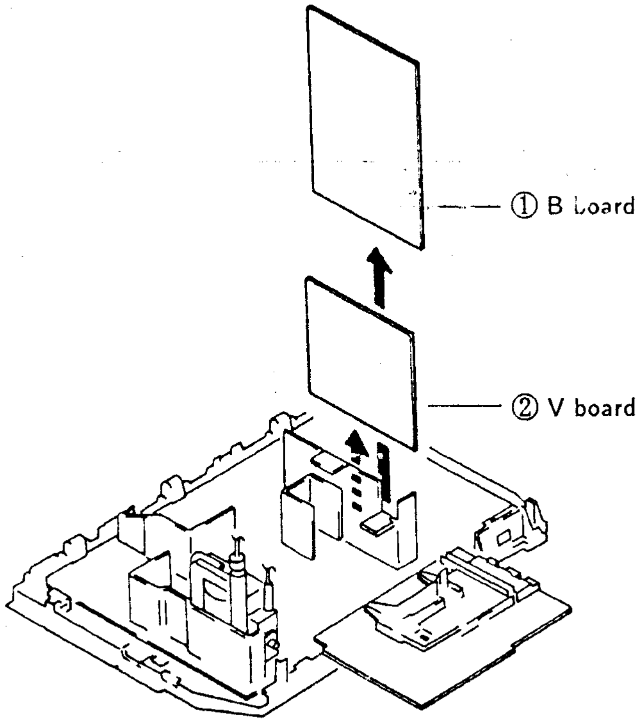

③ H1-H2-F bracket

② Push the two claws of the main chassis in the direction of arrow and remove the H1-H2-F bracket upwards.

2-3. A AND J1 BOARDS REMOVAL


③ Remove the T type rivet.
⑤ PCB supporter
⑧ A board
④ Remove the claw.
⑥ Remove the two T type rivets.
⑦ Remove the claw.
① Remove the claw.
② Open the J1 board in the direction of the arrow ⓐ .
ⓐ
J1 board

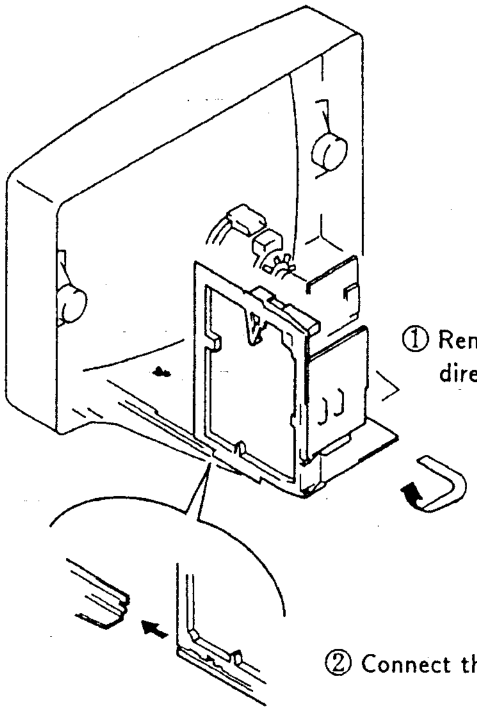
2-4. B AND V BOARDS REMOVAL


① B board
② V board

Note : 10 pin extension cable (S-0945-001-0)

2-5-1. SERVICE POSITION (21inch)

* Remove the bracket from the main chassis assembly and then perform the following servicing.
(Refer to 2-2-1. CHASSIS ASSEMBLY REMOVAL.)

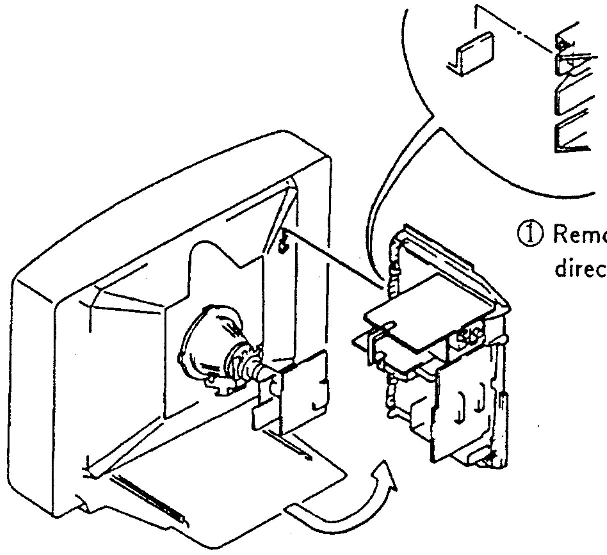


① Remove main chassis assembly in the direction of the arrow.

② Connect the main chassis assembly to the holder.

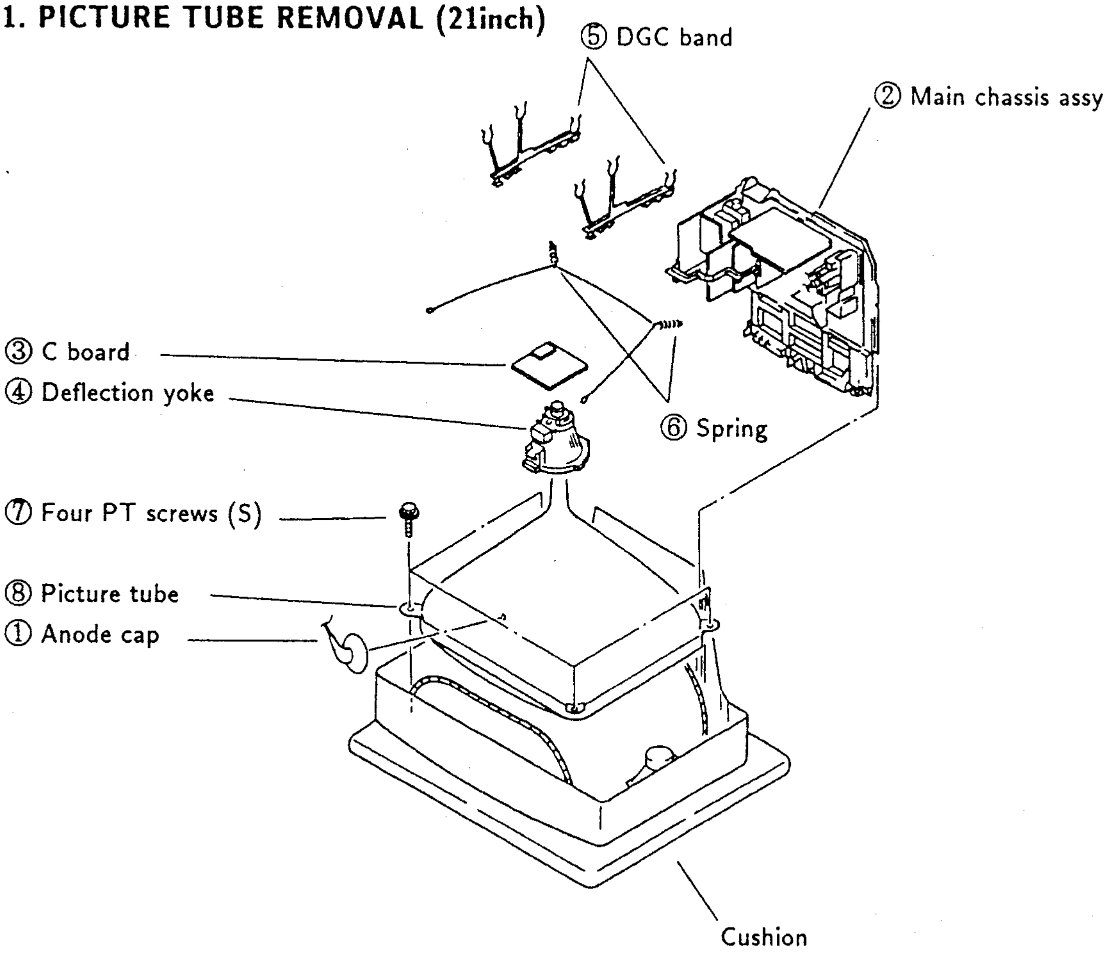
2-5-2. SERVICE POSITION (25inch, 29inch)

* Remove the connector bracket from the main chassis assembly and then perform the following servicing.
(Refer to 2-2-2. CHASSIS ASSEMBLY REMOVAL.)



① Remove main chassis assembly in the direction of the arrow.

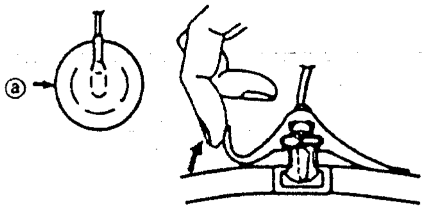
2-6-1. PICTURE TUBE REMOVAL (21inch)


⑤ DGC band
② Main chassis assy
③ C board
④ Deflection yoke
⑥ Spring
⑦ Four PT screws (S)
⑧ Picture tube
① Anode cap
Cushion

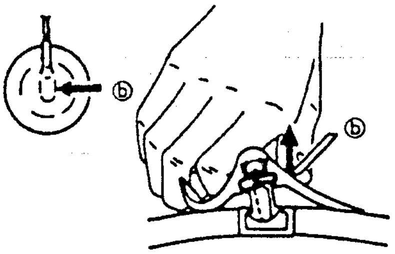
• REMOVAL OF ANODE-CAP

NOTE : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT chield or carbon painted on the CRT, after removing the anode.

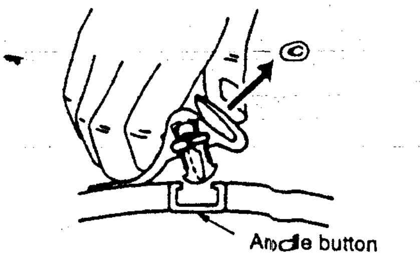
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.


ⓒ
Anode button

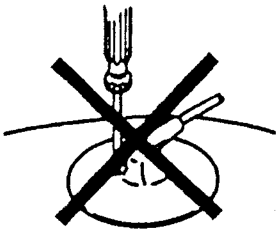
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

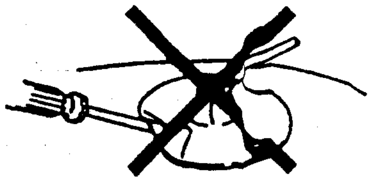
• HOW TO HANDLE AN ANODE-CAP

① Don't hurt the surface of anode-caps with sharp shaped material!

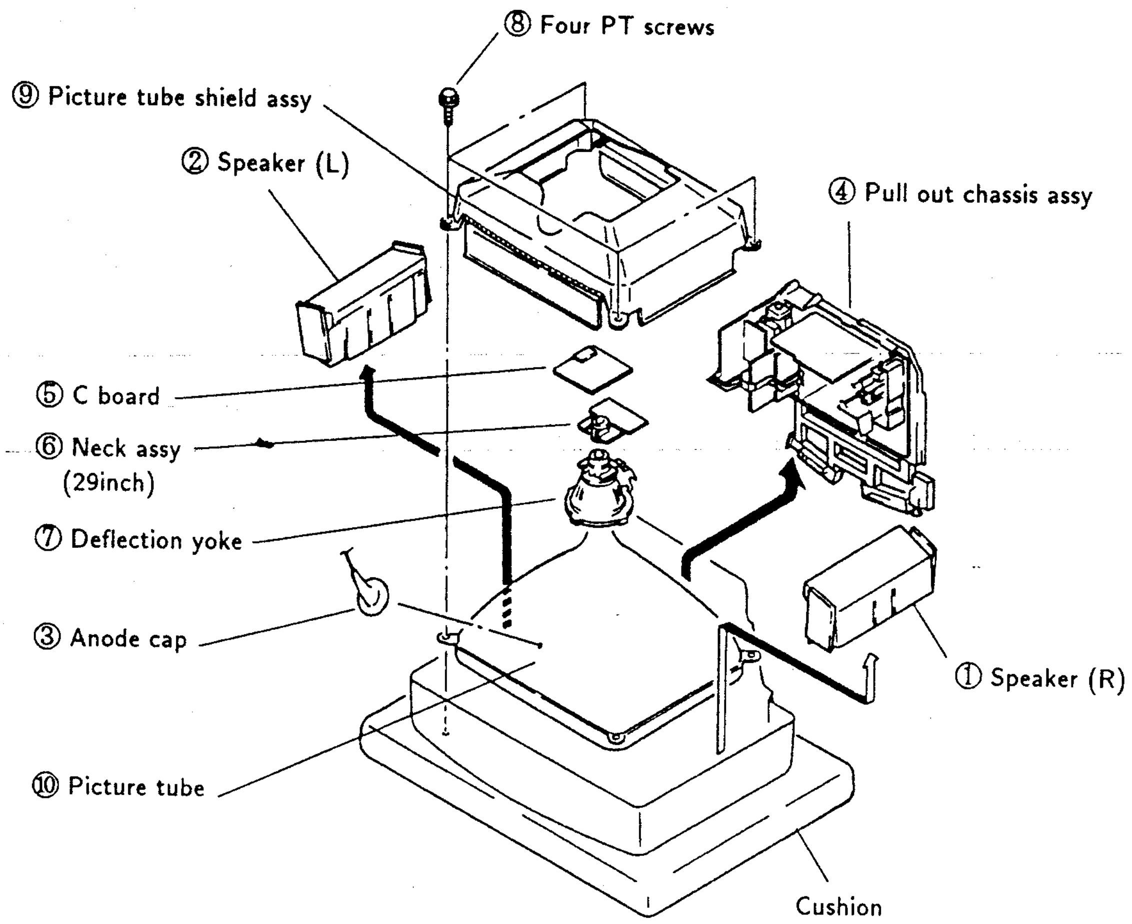
② Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.

③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.



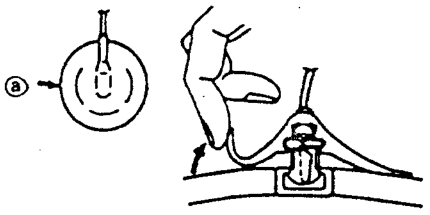


2-6-2. PICTURE TUBE REMOVAL (25inch, 29inch)

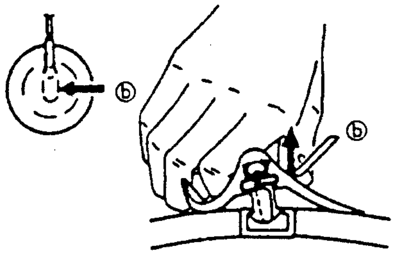

⑧ Four PT screws
⑨ Picture tube shield assy
② Speaker (L)
④ Pull out chassis assy
⑤ C board
⑥ Neck assy (29inch)
⑦ Deflection yoke
③ Anode cap
① Speaker (R)
⑩ Picture tube
Cushion

• REMOVAL OF ANODE-CAP

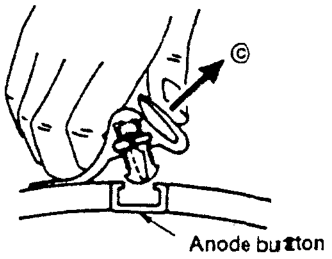
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.


ⓒ
Anode button

③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

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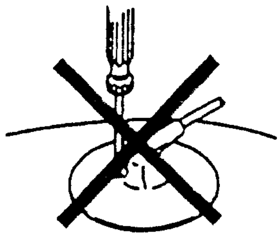
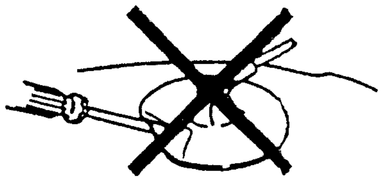
The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and switch below should be set as follows unless otherwise noted :

◑ CONTRASTcontrol········ 80%(or Normal by commander)

☼ BRIGHTNESS control····· 50%

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G 2) and White Balance

Note: Test Equipment Required.

1. Color bar/Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital multimeter
5. Oscilloscope

Preparation: (21 inch, 25 inch)

- Set the side of the unit with the PICTUE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser..

3-1. BEAM LANDING

Demagnetize with a degausser

1. Input a raster signal with the pattern generator.

   CONTRAST } normal
   BRIGHTNESS }
2. Turn the raster signal of the pattern generator to red.
3. Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides evenly. (Fig.3-1 - 3-3)
4. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig.3-1)
5. Switch over the raster signal to blue and blue and confirm the condition.
6. When the position of the deflection yoke is determined,tighten it with a deflection yoke mounting screw.
7. When landing at the corner is not right, adjust by using the disk magnets. (Fig.3-4)

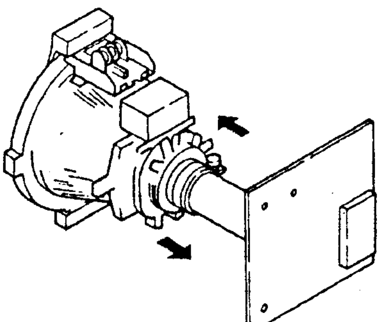


Fig.3-1

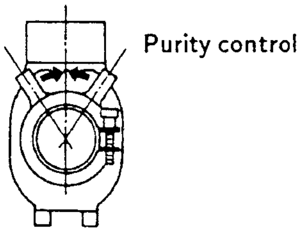

Purity control

Fig.3-2

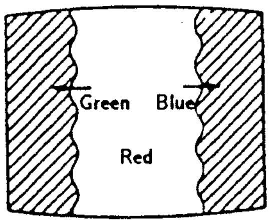

Green
Blue
Red

Fig.3-3

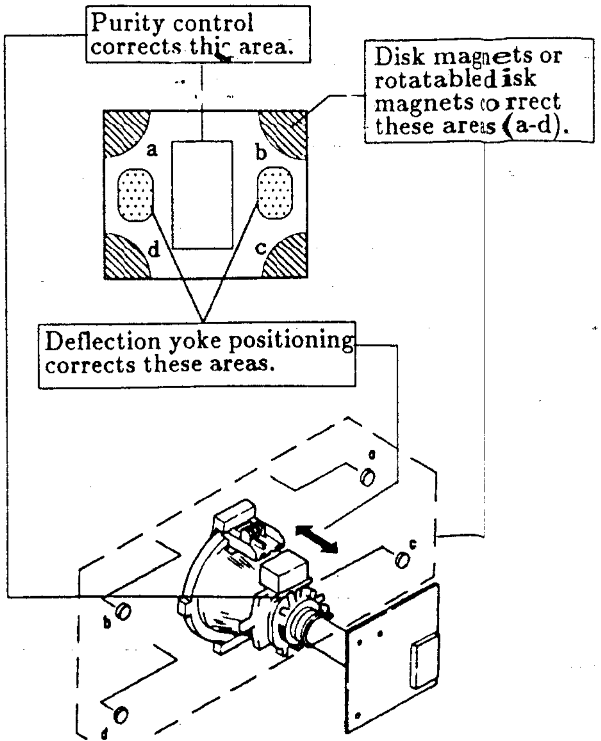

Purity control corrects this area.
Disk magnets or rotatable disk magnets correct these areas (a-d).
a
b
c
d
Deflection yoke positioning corrects these areas.

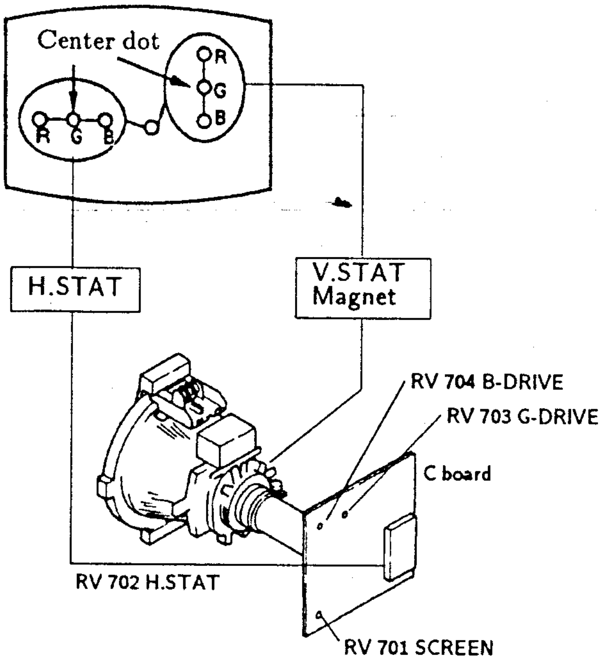
Fig.3-4

3-2. CONVERGENCE

Preparation:

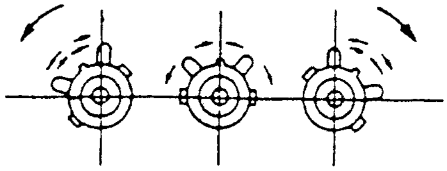
- Before starting, perform FOCUS, H.SIZE, and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.

(1) Horizontal and Vertical Static Convergence

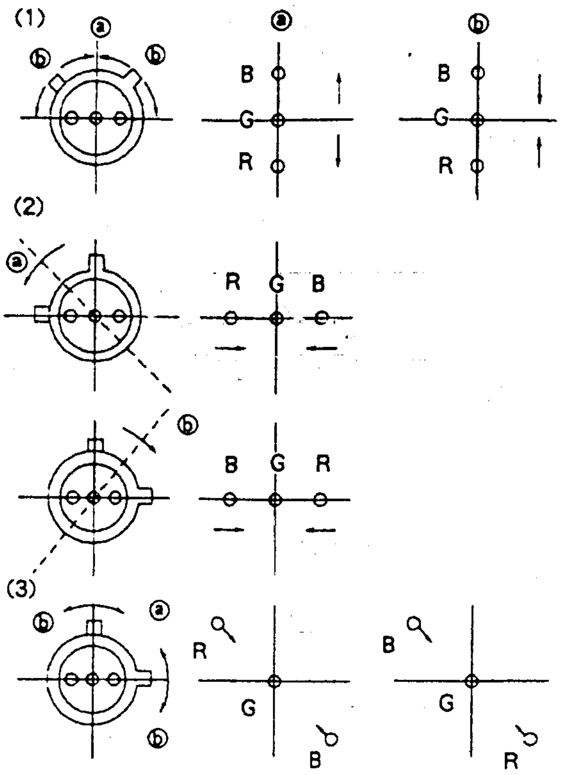

Center dot
R
G
B
R G B
H.STAT
V.STAT Magnet
RV 704 B-DRIVE
RV 703 G-DRIVE
C board
RV 702 H.STAT
RV 701 SCREEN

1. Adjust H.STAT VR to converge red, green and blue dots the in center of the screen.(Horizontal movement)
2. Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen. (Vertical movement)
3. If the red, green and blue dots do not converge on the center of screen with H.STAT VR, perform horizontal convergence adjustment using H.STAT VR and V.STAT magnet as shown below. (In this case, H.STAT VR and V.STAT magnet effect each other.)

- Tilt the V.STAT magnet and adjust static convergence to open or close the V.STAT magnet.



4.When the V.STAT magnet is moved in the direction of arrow ⓐ and ⓑ, red, green and blue dots move as shown below.


(1)
ⓐ
ⓑ
ⓑ
ⓐ
B
G
R
ⓑ
B
G
R
(2)
ⓐ
R G B
ⓑ
B G R
(3)
ⓑ
ⓐ
ⓑ
R
G
B
B
G
R

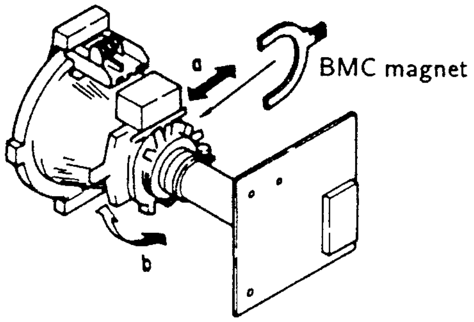
(KV-21 inch only)

If the red and blue dot do not converge with green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H.static convergence.

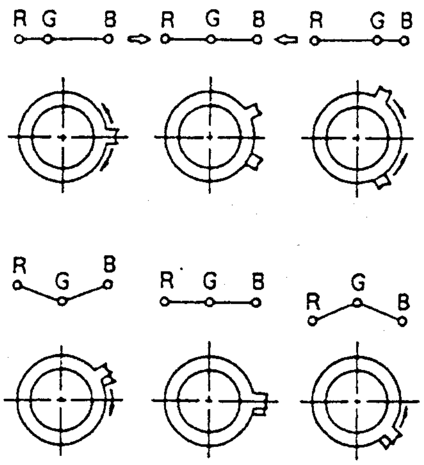
Rotate BMC magnet (b) to correct insufficient V.static convergence.

In either case, repeat Beam Landing Adjustment.

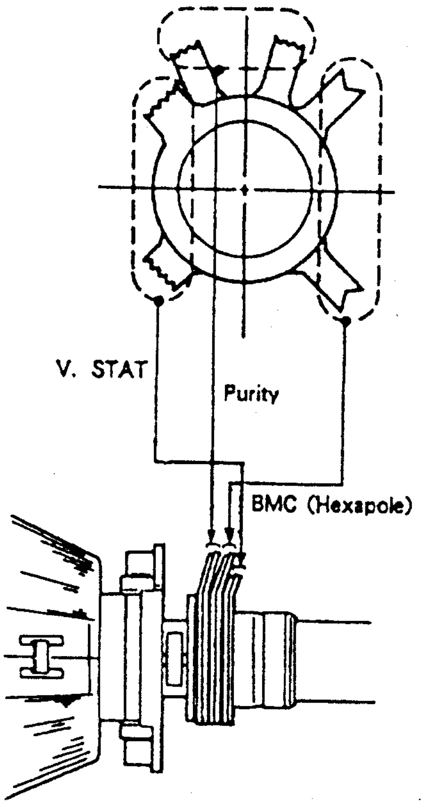

a
BMC magnet
b

(KV-25 inch only)

- Operation of BMC (Hexapole) Magnet


R G B
R G B
R G B
R G B
R G B
R G B

- The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
  Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).

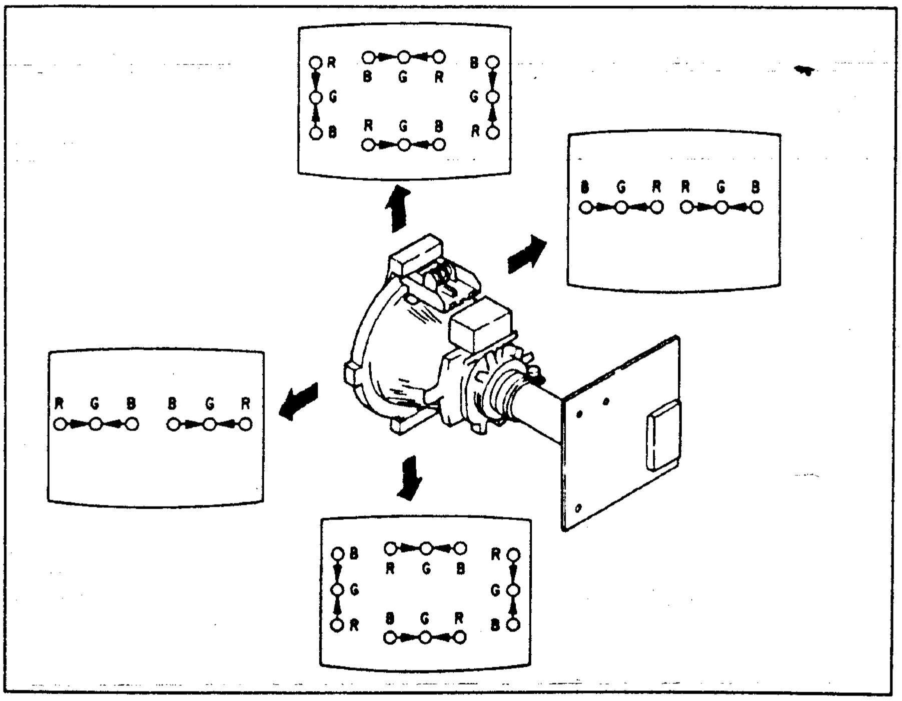

V. STAT
Purity
BMC (Hexapole)

(2)Dynamic Convergence Adjustment

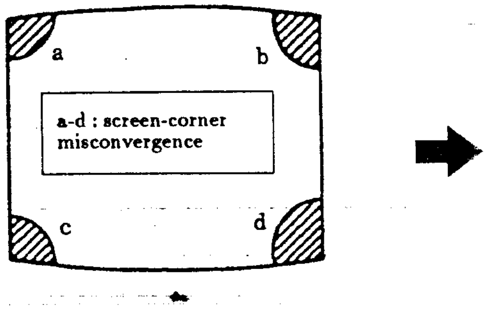
Preparation:

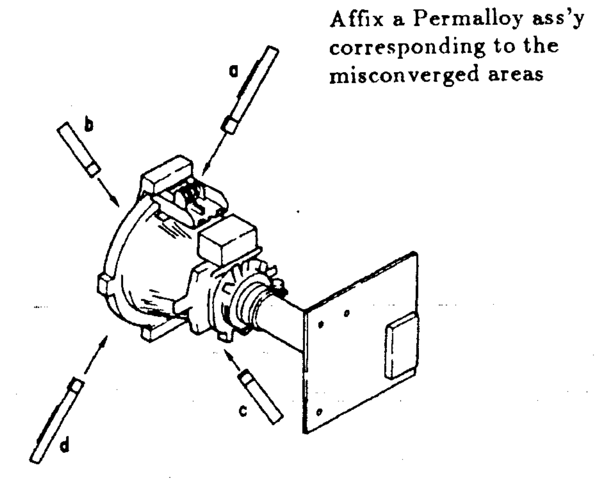
- Before starting perform Horizontal and Vertical static convergence Adjustment.

1. Slightly loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergenceas shown below.
4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.


R G B B G R
B G R R G B
B G R R G B
R G B B G R
B G R R G B

(3) Screen-corner Convergence


a
b
a-d : screen-corner misconvergence
c
d

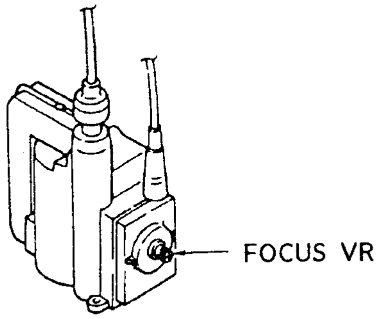


Affix a Permalloy ass'y corresponding to the misconverged areas

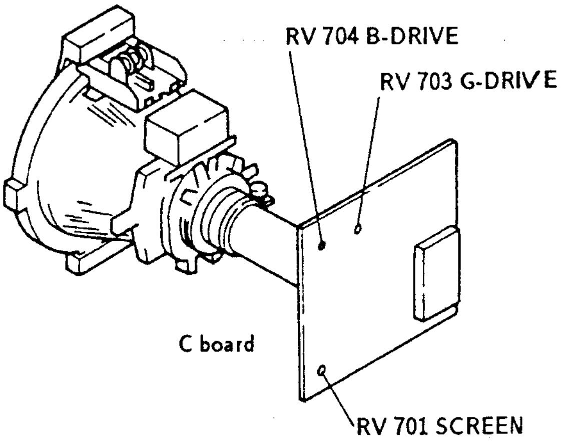
Permalloy assembly

3-3. FOCUS

Adjust FOCUS so that the whole screen is in best focus.



3-4. SCREEN (G 2) and WHITE BALANCE


RV 704 B-DRIVE
RV 703 G-DRIVE
C board
RV 701 SCREEN

Screen (G 2) Setting

1. Input dot signal from the pattern generator.
2. Set the picture BRIGHTNESS control to minimum level.
3. Apply 170 V DC to the cathodes of R,G and B from an external power power source.
4. While watching the picture, adjust the G 2 volume (RV701) immediately before fly-back line disappears.

White Balance Adjustment

1. Input all-white signal from the pattern generator.
2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
3. Adjust the following using RV 704 (B DRIVE) and RV 703 (G DRIVE)

In the following adjustments, the CONTRAST, COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

Preparations : (29 inch)

- In order to reduce the influence of geomagnetism on the set's picture tube face it east or west.
- Switch on the set's power and degauss with the degausser.

3-5. BEAM LANDING

1. Input the white signal with the pattern generator.
   Contrast } normal
   Bightness }
2. Position neck ass'y as shown in Fig 3-6.
3. Set the pattern generator raster signal to red.
4. Move the deflection yoke to the rear and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side.
   (See Figures 3-5 through 3-7.)
5. Move the deflection yoke forward and adjust so that entire screen is red. (See Figure 3-5.)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it.
   (See Figure 3-8.)

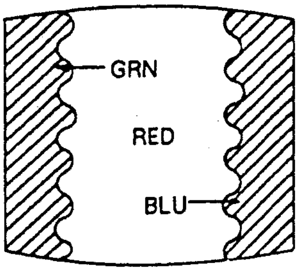


Fig. 3-7

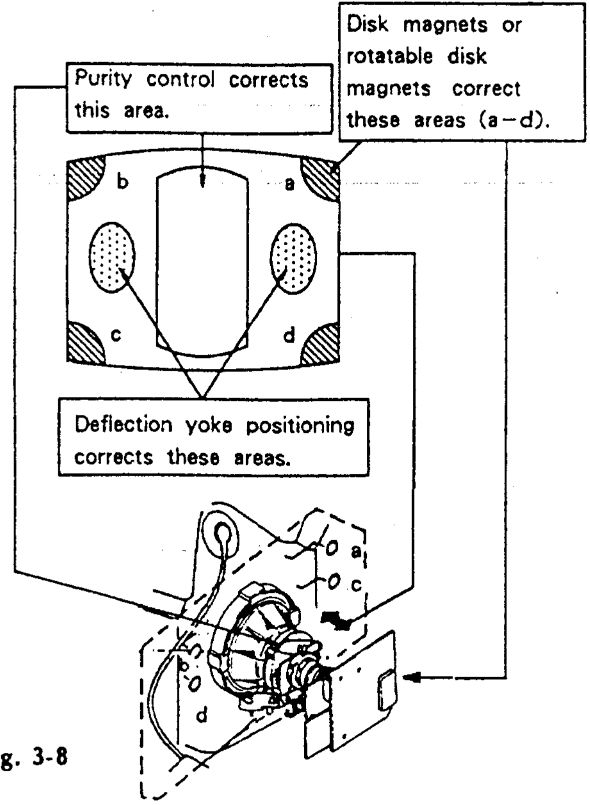

Disk magnets or rotatable disk magnets correct these areas (a–d).
Purity control corrects this area.
b
a
c
d
Deflection yoke positioning corrects these areas.
a
c
b
d

Fig. 3-8

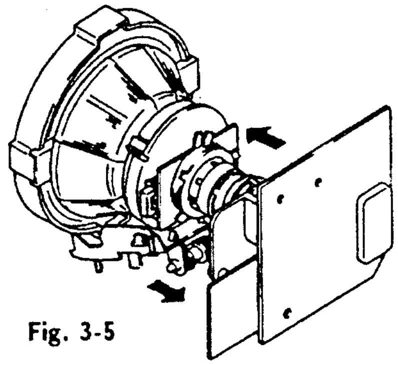


Fig. 3-5

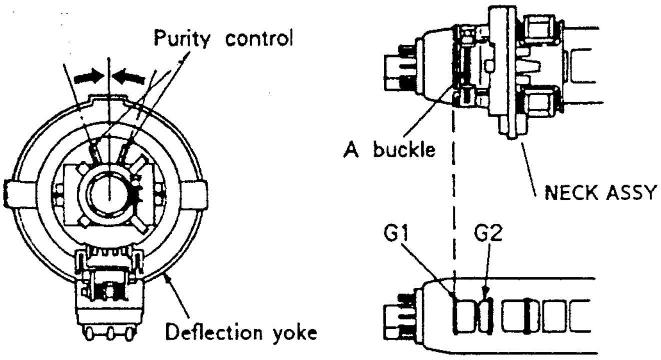
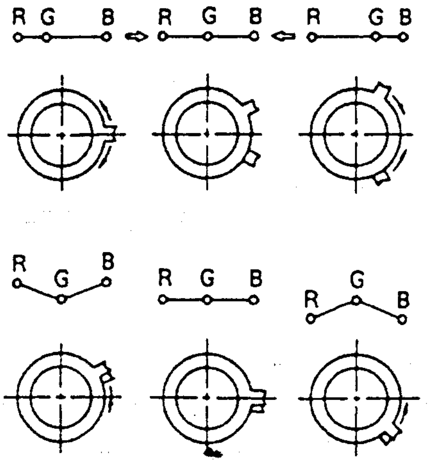
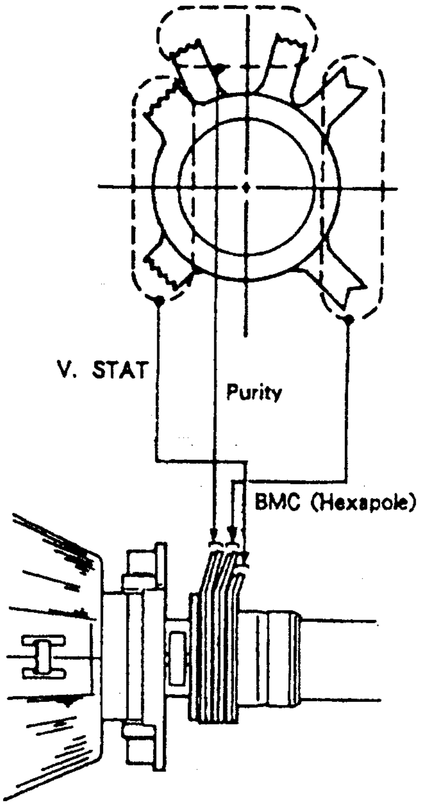

Purity control
Deflection yoke
A buckle
NECK ASSY
G1
G2

Fig. 3-6

- Operation of BMC (Hexapole) Magnet


R G B
R G B
R G B
R G B
R G B
R G B

- The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
  Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).

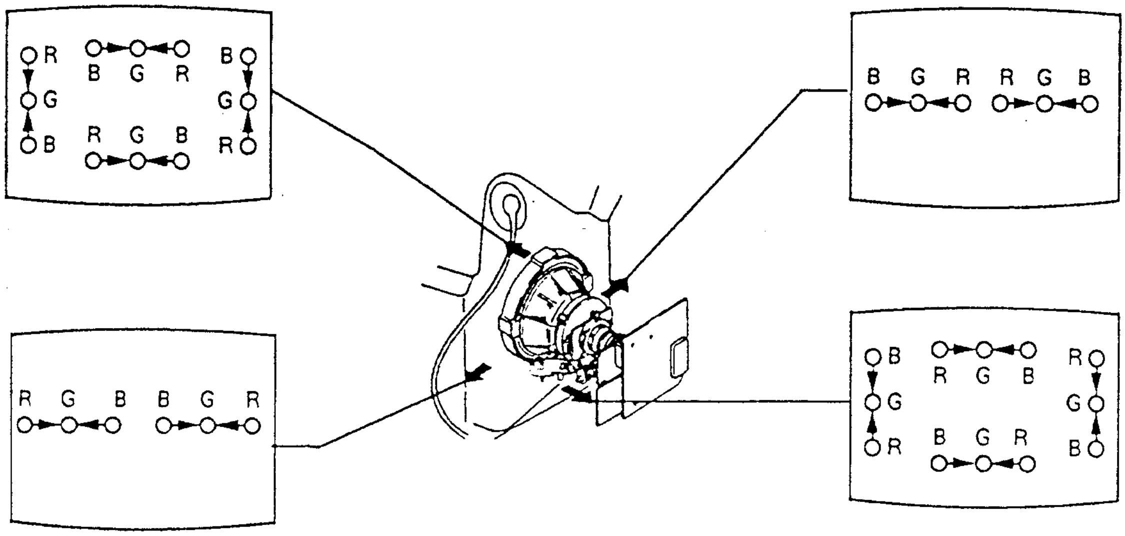

V. STAT
Purity
BMC (Hexapole)

(2) Dynamic convergence adjustment

Preparations :

Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Install the defelection yoke spacer.

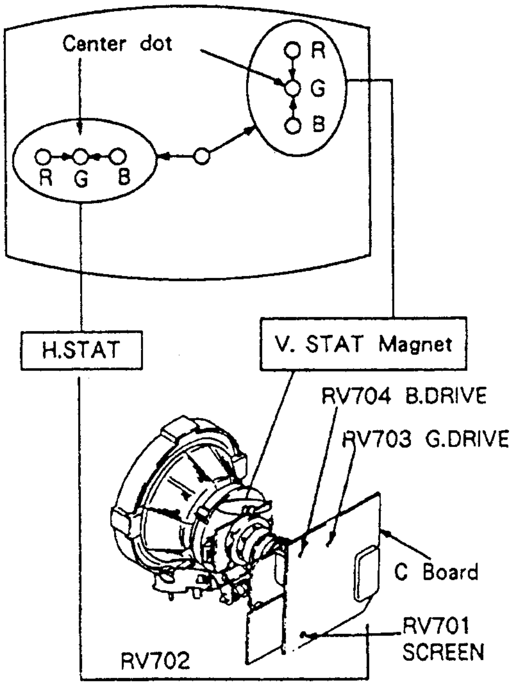

R G B
B G R
R G B
B G R
R G B
B G R
B G R R G B
R G B B G R
B G R
R G B
R G B
B G R
R G B
B G R

3-6. CONVERGENCE

Preparations :

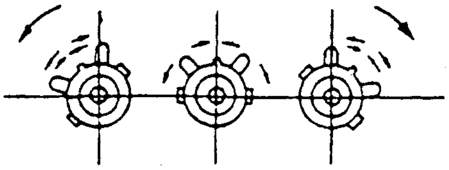
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

(1) Horizontal and vertical static convergence

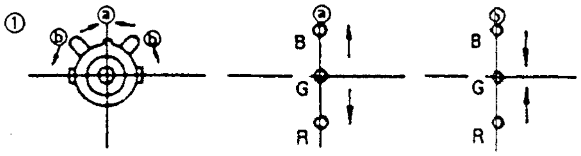

Center dot
R
G
B
R G B
H.STAT
V. STAT Magnet
RV704 B.DRIVE
RV703 G.DRIVE
C Board
RV701 SCREEN
RV702

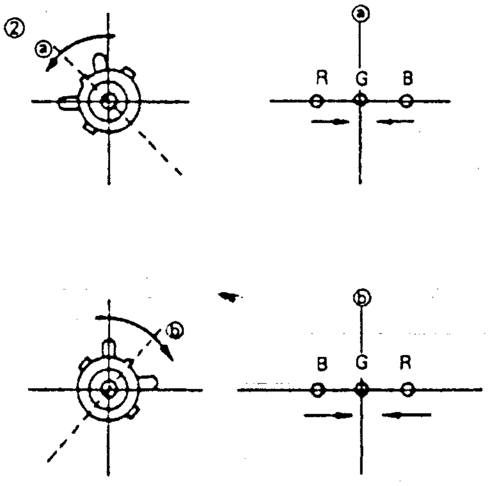
1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V. STAT magnet in the manner given below.
(In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

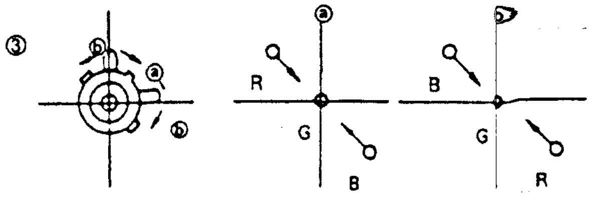
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



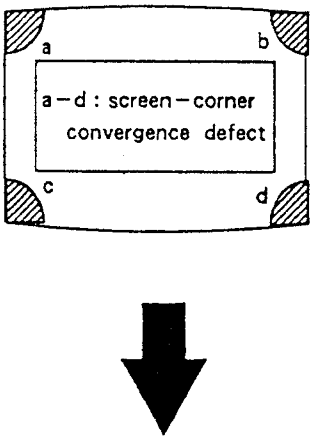
4. If the V.STAT magnet is moved in the direction of the ⓐ and ⓑ arrows, the red, green, and blue points move as shown below.



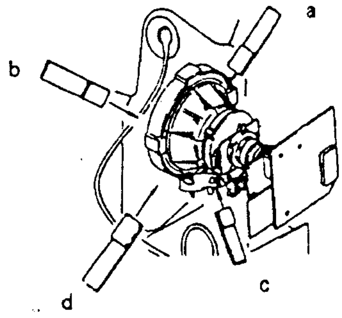




(3) Screen corner convergence



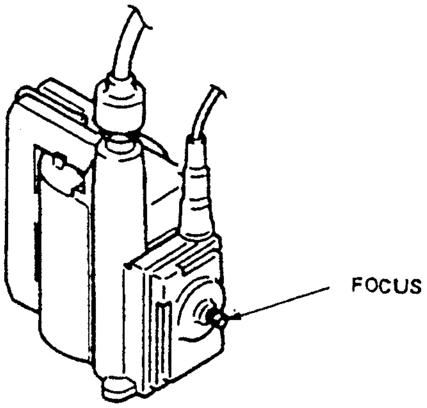
Install the permalloy assembly for the section with faulty.



Permalloy

3-7. FOCUS

Adjust the focus to optimize the screen.



3-8. WHITE BALANCE

[Screen G2 setting]

1. Input the dot signal from the pattern generator.
2. Set the picture brightness control to its lowest level.
3. Apply 170V DC to the R, G, and B cathodes with an external power supply.
4. While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

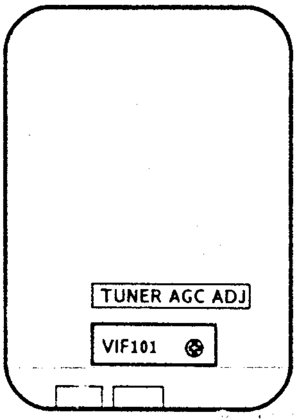
[White balance adjustment]

1. Input an all-white signal from the pattern generator.
2. Set the picture brightness and color controls to their normal levels.
3. Use the RV704 (B Drive) and RV703 (G Drive) to adjust white balance.

In the adjustments below, have the picture color and brightness settings at their normal levels unless there is a specific instruction to the contrary.

SECTION 4
CIRCUIT ADJUSTMENTS

4-1. A BOARD ADJUSTMENTS

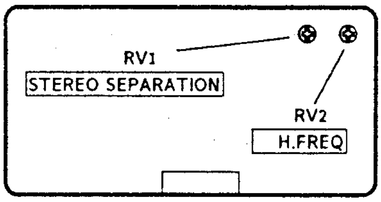


A BOARD (COMPONENT SIDE)

TUNER AGC ADJUSTMENT (AGC VR)

1. Align with an appropriate signal between stations.
2. Adjust AGC VR so that snow noise and cross modulation just disappear from the picture.

IFG5.5S SIF



IFG5.5S SIF -component side-

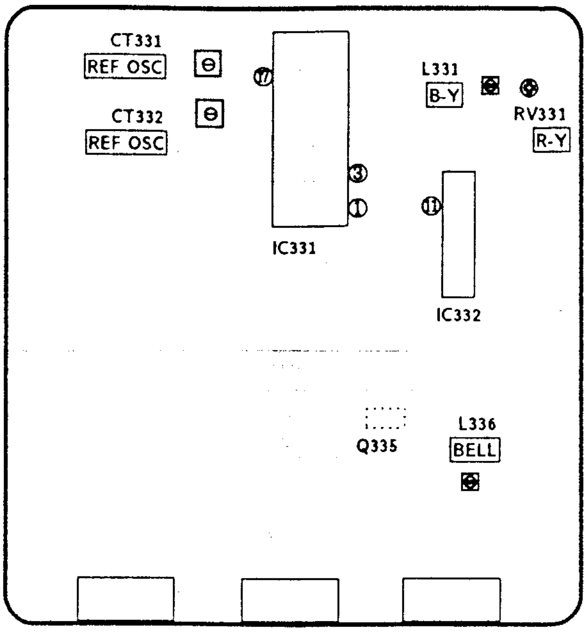
STEREO SEPALATION ADJUSTMENT (RV1)

1. Input stereo signals. (L-CH 400Hz, R-CH 1KHz)
2. Check the stereo indicator.
3. Connect on oscilloscope to pin⑧ (CH1) of CN1 through band pass filter of 1KHz
4. Adjust RV1 so that 1KHz voltage goes down to the minmum.

H FREQ (RV2)

1. Input a PAL COLOR BAR signal, then connect a jumper between pin⑫ IC4 and GND.
2. Connect a frequency counter to pin④ IFG5.5S (HP) of CN1 through a probe of 10 : 1.
3. Adjust RV2 (H.FREQ) 15.625±50Hz.
4. After adjustment, remove the jamper.

4-2. B BOARD ADJUSTMENTS



B BOARD (COMPONENT SIDE)

REFERENCE OSCILLATOR ADJUSTMENT (CT332 8.8MHz)

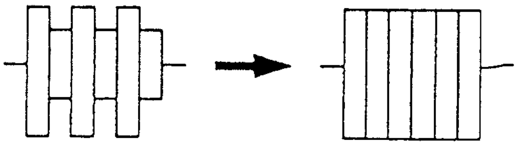
1. Input a PAL color bar signal.
2. Ground pin ⑰ of the IC331.
3. Adjust CT332 to obtain synchronization.

REFERENCE OSCILLATOR ADJUSTMENT (CT331 7.16MHz)

1. Input an NTSC358 color bar signal.
2. Ground pin ⑰ of IC331.
3. Adjust the CT331 to obtain synchronization.
4. Remove the jumper grounding pin ⑰ of IC331.

BELL FILTER ADJUSTMENT (L336)

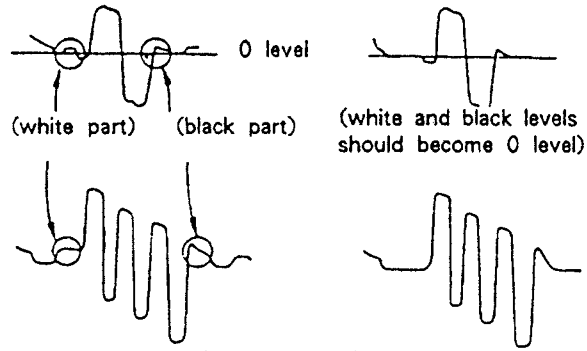
1. Input a SECAM color bar signal.
2. Connect the oscilloscope to the emitter of Q335.
3. Adjust L336 so that the waveform is flat.



<Before Adjustment> <After Adjustment>

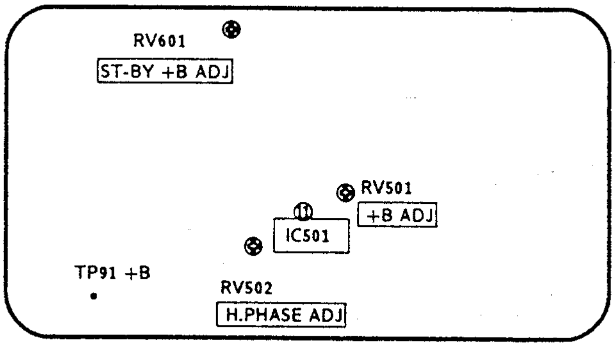
DISCRIMINATION ADJUSTMENTS (RV331 and L331)

1. Input a SECAM color bar signal.
2. Connect the oscilloscope to pin ① of IC331.
3. Adjust RV331 until the white and black sections of the waveform at pin ① are at the 0 level.
   Connect the oscilloscope to pin ③ of IC331.
4. Adjust L331 until the white and black sections of the waveform at pin ③ are at the 0 level.



(Before Adjustment) (After adjustment)

4-3. D BOARD ADJUSTMENTS



D BOARD (COMPONENT SIDE)

+B ADJUSTMENT (RV501)

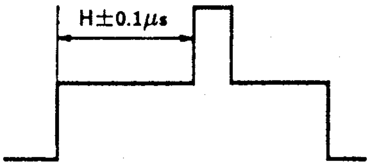
1. Connect the digital multimeter to TP91.
2. Adjust RV501 to obtain 135±0.2V.

ST-BY +B ADJUSTMENT (RV601)

1. Put the system into ⏻ standby mode (remote commander).
2. Connect the digital multimeter to TP91.
3. Adjust RV601 to obtain 135±3V.
4. Take the system out of ⏻ standby mode (remote commander).

H.PHASE ADJUSTMENT (RV502)

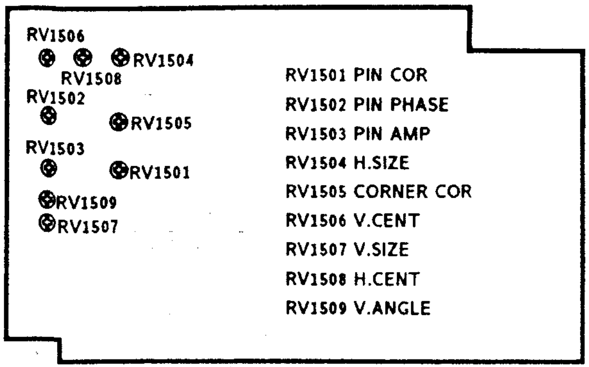
1. Input a PAL color bar signal.
2. Set the picture and brightness controls to their normal levels.
3. Set RV1508 (H.CENT) to its mechanical center.
4. Connect the oscilloscope to pin ⑪ (SCP) of IC 501.
5. Rotate RV502 to adjust to H±0.1μs.



Standard of H. PHASE

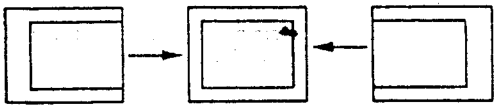
Model Size	H
21″	5.6μs
25″	5.1μs
29″	5.5μs

4-4. J1 BOARD ADJUSTMENTS

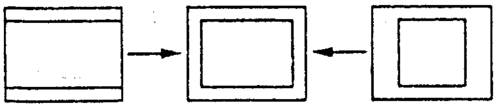

RV1506
RV1504
RV1508
RV1502
RV1505
RV1503
RV1501
RV1509
RV1507
RV1501 PIN COR
RV1502 PIN PHASE
RV1503 PIN AMP
RV1504 H.SIZE
RV1505 CORNER COR
RV1506 V.CENT
RV1507 V.SIZE
RV1508 H.CENT
RV1509 V.ANGLE

J1 BOARD (COMPONENT SIDE)

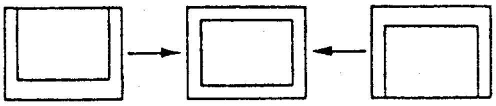
RV1508
H. CENT (HORIZONTAL CENTER)



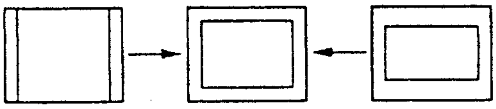
RV1504
H. SIZE (HORIZONTAL SIZE)



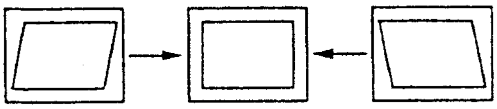
RV1506
V. CENT (VERTICAL CENTER)



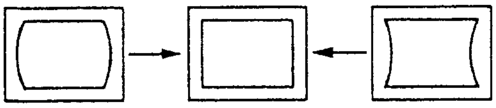
RV1507
V. SIZE (VERTICAL SIZE)



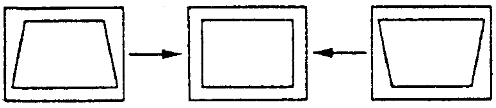
RV1509
V. ANGLE (VERTICAL ANGLE)



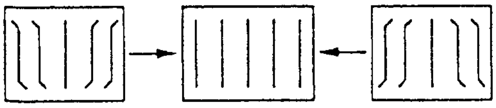
RV1503
PIN AMP (PINCUSHION AMPLIFIER)



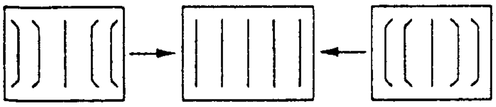
RV1502
PIN PHASE (PINCUSHION PHASE)



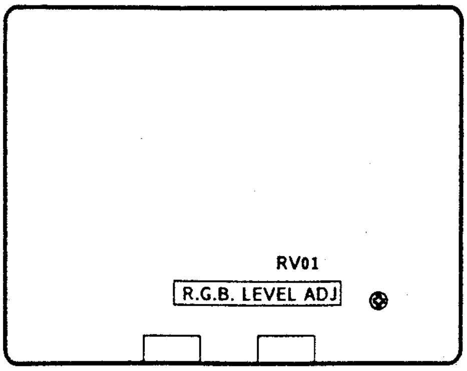
RV1501
PIN. COR (PINCUSHION CORRECT)



RV1505
CORNER COR (CORNER CORRECT)



4-5. V BOARD ADJUSTMENT


RV01
R.G.B. LEVEL ADJ

V BOARD (COMPONENT SIDE)

RGB LEVEL ADJUSTMENT (RV01)

1. Maximize the picture setting.
2. Adjust RV01 so that the RGB output is 0.75V.

4-6. SECONDARY ADJUSTMENTS

SUB BRIGHTNESS ADJUSTMENT

1. Set the system to receive a test pattern.
2. Press →•← on the remote commander to put the system into normal mode.
3. Switch off the power.
4. While depressing the adjusting buttons + and − simultaneusly, turn on the power. (SUB mode is obtained)
5. Minimize the ◑ contrast setting.
6. Adjust the ☼ brightness control so that the gray scale 0 IRE section is cut off completely and the 20 IRE section is barely glowing.
7. Depress the ◇ (store) button of the remote commander.
   (SUB mode is released)

If there is no test color pattern

1. Set the system to receive a color pattern.
2. Press →•← on the remote commander to put the system into normal mode.
   Set the ⊛ color to its normal state.

3-5. Steps are the same as above.

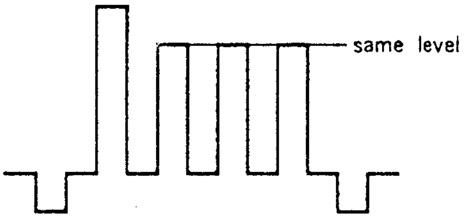
6. Since 20 IRE is nearly blue, adjust the ☼ brightness control so that the blue barely glows.

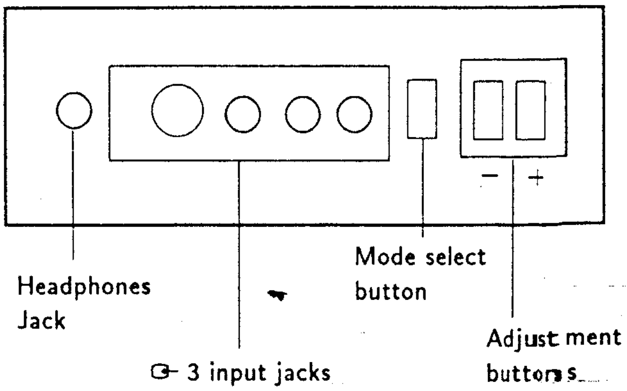
7. Same as step 7 above.

8. Press →•← on the remote commander to put the system into normal mode.

SUB COLOR ADJUSTMENT

1. Set the system to receive color bars.
2. Press →•← on the remote commander to put the system into normal mode.
3. Cut off the power.
4. While depressing the adjustment buttons + and − simultaneusly, turn on the power. (SUB mode is obtained).
5. Adjust the color control so that the B out waveform (pin ⑤ of C board connector CNC72) is as shown in the figure below.
6. Depress the ◇ (store) button of the remote commander. (SUB mode is released)

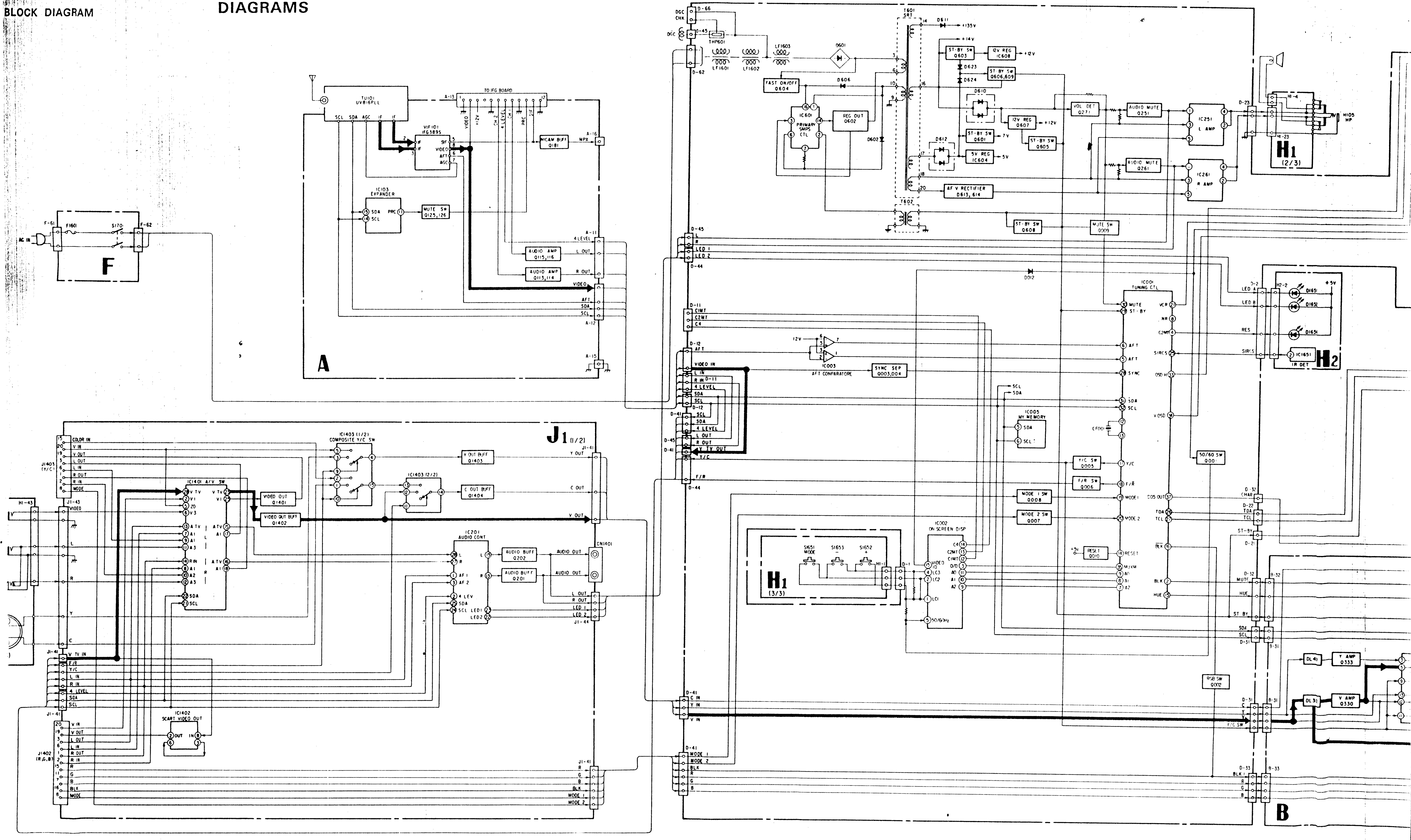




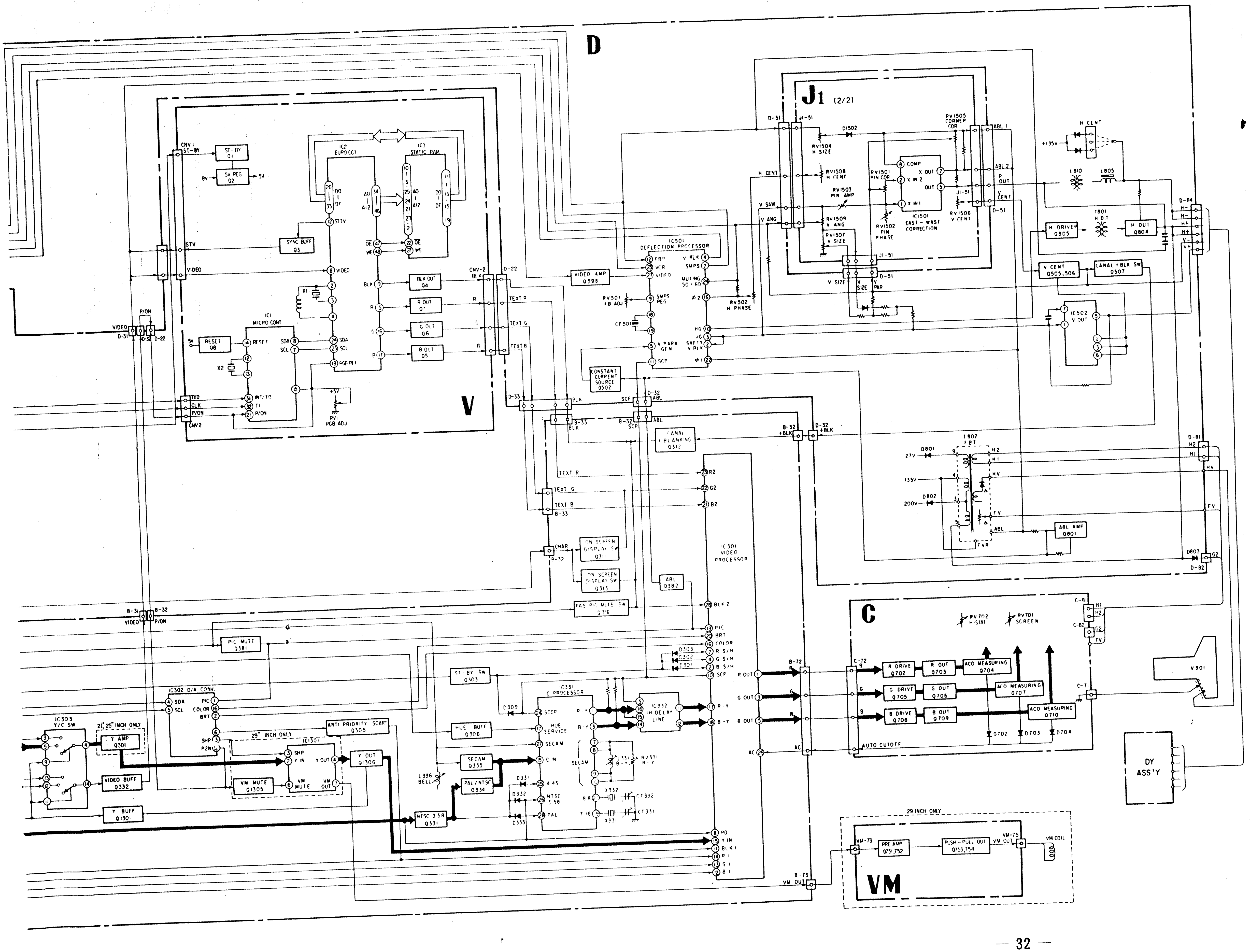
MEMO

SECTION 5 DIAGRAMS

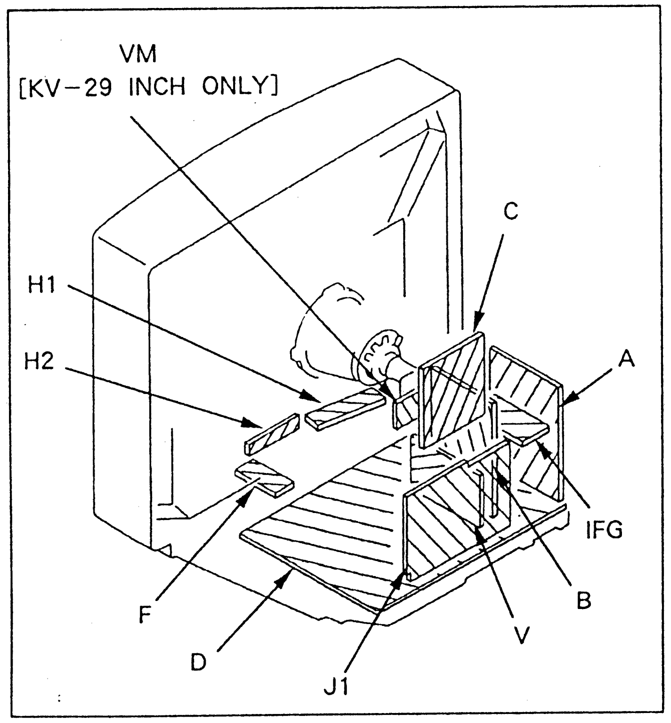
BLOCK DIAGRAM


F
AC IN
F-61
F1601
S1701
F-62
A
TU101 UV816PLL
SCL SDA AGC IF IF
TO IFG BOARD
A-13
VIF101 IFG3895
SIF
VIDEO
AFT
AGC
NICAM BUFF Q181
MPX
A-16
IC103 EXPANDER
SDA
SCL
PRC
MUTE SW Q125,126
AUDIO AMP Q115,116
AUDIO AMP Q113,114
4 LEVEL
L OUT
R OUT
VIDEO
AFT
SDA
SCL
A-11
A-12
A-15
J1 (1/2)
J1403 (Y/C)
COLOR IN
V IN
V OUT
L OUT
L IN
R OUT
R IN
MODE
IC1403 (1/2) COMPOSITE Y/C SW
IC1403 (2/2)
Y OUT BUFF Q1403
C OUT BUFF Q1404
IC1401 A/V SW
VIDEO OUT Q1401
VIDEO OUT BUFF Q1402
Y OUT
C OUT
V OUT
IC201 AUDIO CONT
AUDIO BUFF Q202
AUDIO BUFF Q201
AUDIO OUT
CN1401
L OUT
R OUT
LED 1
LED 2
J1-41
J1-43
J1-44
H1-43
V TV IN
F/R
Y/C
L IN
R IN
4 LEVEL
SDA
SCL
IC1402 SCART VIDEO OUT
J1402 (R,G,B)
R
G
B
BLK
MODE
MODE 1
MODE 2
DGC CHK
DGC
D-66
D-45
D-62
THP601
LF1601
LF1602
LF1603
D601
T601 SRT
D611
+135V
+14V
ST-BY SW Q603
12V REG IC608
+12V
D623
D624
ST BY SW Q606,609
D610
12V REG Q607
ST-BY SW Q601
7V
ST-BY SW Q605
D612
5V REG IC604
5V
FAST ON/OFF Q604
D606
IC601 PRIMARY SMPS CTL
REG OUT Q602
D602
AF V RECTIFIER D613,614
T602
ST-BY SW Q608
MUTE SW Q009
VOL DET Q271
AUDIO MUTE Q251
AUDIO MUTE Q261
IC251 L AMP
IC261 R AMP
D-23
H1-4
H1-23
H105 HP
H1 (2/3)
D-45
L
R
LED 1
LED 2
D-44
D012
D-11
C1MT
C2MT
C4
D-12
AFT
IC003 AFT COMPARATORE
12V
SYNC SEP Q003,004
VIDEO IN
L IN
R IN
4 LEVEL
SDA
SCL
D-41
L OUT
R OUT
V TV OUT
Y/C
F/R
IC001 TUNING CTL
MUTE
ST-BY
AFT
SYNC
SDA
SCL
CF001
VCR
NR
C2MT
SIRCS
OSD H
V OSD
IC005 MY MEMORY
Y/C SW Q005
F/R SW Q006
MODE 1 SW Q008
MODE 2 SW Q007
RESET Q010
50/60 SW Q001
COS OUT
TDA
TCL
BLK
HUE
MODE 1
MODE 2
RESET
IC002 ON SCREEN DISP
VIDEO
LC3
LC2
LC1
50/60Hz
C4
C2MT
C1MT
A0
A1
A2
H1 (3/3)
S1651 MODE
S1653 −
S1652 +
H1-1
D-1
D-2
LED A
LED B
RES
SIRCS
H2-2
D1651
D1652
D1654
+5V
IC1651 IR DET
H2
D-32
CHAR
D-22
TDA
TCL
ST-BY
D-21
D-12
B-32
MUTE
HUE
ST BY
SDA
SCL
D-31
B-31
RGB SW Q012
DL401
Y AMP Q333
DL301
V AMP Q330
C IN
Y IN
V IN
Y/C SW
D-33
B-33
BLK
R
G
B
B

KV-C2161D/C2561D/C2961D
RM-816


D
V
J1 (2/2)
C
VM
CNV1
ST-BY
ST-BY Q1
5V REG Q2
8V
5V
IC2 EUROCCT
IC3 STATIC-RAM
A0
A12
D0
D7
STTV
OE
WE
SYNC BUFF Q3
STV
VIDEO
X1
IC1 MICRO CONT
RESET Q8
RESET
SDA
SCL
X2
INT, T0
TI
P/ON
TXD
CLK
CNV2
RV1 RGB ADJ
+5V
PGB REF
BLK OUT Q4
R OUT Q7
G OUT Q6
B OUT Q5
CNV-2
BLK
R
G
B
D-22
TEXT R
TEXT G
TEXT B
VIDEO
P/ON
D-31
D-33
B-33
B-32
SCP
ABL
D-32
VIDEO AMP Q598
IC501 DEFLECTION PROCESSOR
FBP
VCR
V BLK
SMPS
MUTING 50/60
RV501 +B ADJ
SMPS PEG
CF501
V PARA GEN
SAFTY V BLK
HG
RV502 H PHASE
CONSTANT CURRENT SOURCE Q502
D-51
J1-51
H CENT
V SAW
V ANG
D1502
RV1504 H SIZE
RV1508 H CENT
RV1503 PIN AMP
RV1509 V ANG
RV1507 V SIZE
RV1501 PIN COR
RV1502 PIN PHASE
RV1505 CORNER COR
IC1501 EAST-WAST CORRECTION
COMP
X OUT
OUT
RV1506 V CENT
ABL 1
ABL 2
P OUT
V CENT
V SIZE
PAR
H CENT
+135V
L810
L805
T801 H.D.T
H DRIVER Q805
H OUT Q804
D-84
H-
H+
V-
V+
V CENT Q505,506
CANAL + BLK SW Q507
IC502 V OUT
CANAL + BLANKING Q312
B-32 +BLK
D-32 +BLK
T802 FBT
D801
27V
135V
D802
200V
H2
H1
HV
FV
FVR
ABL
ABL AMP Q801
D803
D-81
D-82
G2
TEXT R
TEXT G
TEXT B
CHAR
ON SCREEN DISPLAY SW Q311
ON SCREEN DISPLAY SW Q313
ABL Q382
IC301 VIDEO PROCESSOR
R2
G2
B2
FAS PIC MUTE SW Q316
BLK 2
PIC
BRT
COLOR
R S/H
G S/H
B S/H
SCP
D303
D302
D301
B-31
B-32
PIC MUTE Q381
ST-BY SW Q303
IC302 D/A CONV.
SDA
SCL
PIC
COLOR
BRT
SHP
P2N
IC303 Y/C SW
21" 25" INCH ONLY
Y AMP Q301
29" INCH ONLY
IC1301
SHP
Y IN
Y OUT
VM MUTE Q1305
VM MUTE
VM OUT
ANTI PRIORITY SCART Q305
Y OUT Q1306
VIDEO BUFF Q332
Y BUFF Q1301
IC331 C PROCESSOR
D309
SCCP
HUE SERVICE
SECAM
C IN
4.43
NTSC 3.58
PAL
HUE BUFF Q306
SECAM Q335
PAL/NTSC Q334
L336 BELL
D331
D332
D333
NTSC 3.58 Q331
R-Y
B-Y
L331 R-Y
RV331 R-Y
X332
CT332
X331
CT331
8.8
7.16
IC332 1H DELAY LINE
R OUT
G OUT
B OUT
AC
PD
Y IN
BLK 1
R I
G I
B I
B-72
B-73
VM OUT
RV702 H-STAT
RV701 SCREEN
C-72
R DRIVE Q702
R OUT Q703
ACO MEASURING Q704
G DRIVE Q705
G OUT Q706
ACO MEASURING Q707
B DRIVE Q708
B OUT Q709
ACO MEASURING Q710
D702
D703
D704
AUTO CUTOFF
C-81
C-82
C-71
V901
DY ASS'Y
29 INCH ONLY
VM-73
PRE AMP Q751,752
PUSH-PULL OUT Q753,754
VM-75
VM OUT
VM COIL

5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in μF unless otherwise noted.
  pF : μμF 50WV or less are not indicated except for electrolytic.
- Indication of resistance, which dose not have one for rating electrical power, is as follows.

Pitch : 5mm
Rating electrical power : ¼W

- Chip resistor is in 1/10W.
- All resistors are in ohms.
  kΩ = 1000Ω, MΩ = 1000KΩ
- : nonflammable resistor.
- : fusible resistor.
- Δ : internal component.
- ▭ : panel designation or adjustment for repair.
- All variable and adjustable resistors have charactristic curve B, unless otherwise noted.
- All voltages are in V.
- Readings are taken with a 10MΩ digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- ━ : B + bus.
- ➡ : signal path.(RF)

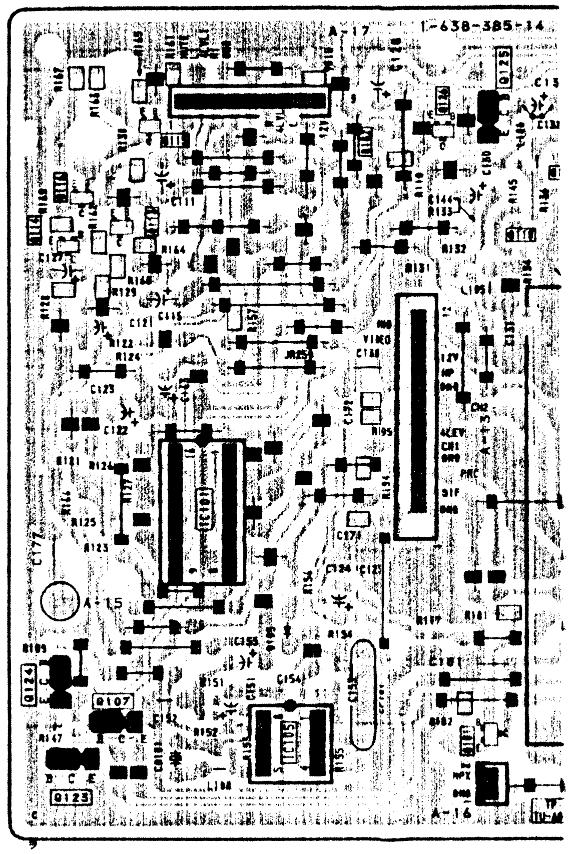
Reference information

RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NONFLAMMABLE CARBON
	FUSE	: NONFLAMMABLE FUSIBLE
	RS	: NONFLAMMABLE METAL OXIDE
	RB	: NONFLAMMABLE CEMENT
	RW	: NONFLAMMABLE WIREWOUND
	※	: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

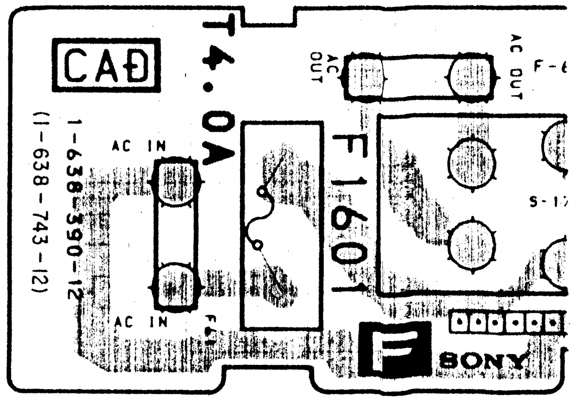
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

A [TUNER, SIF, VIF] **F** [AC IN, POWER SW

−A Board−



−F Board−



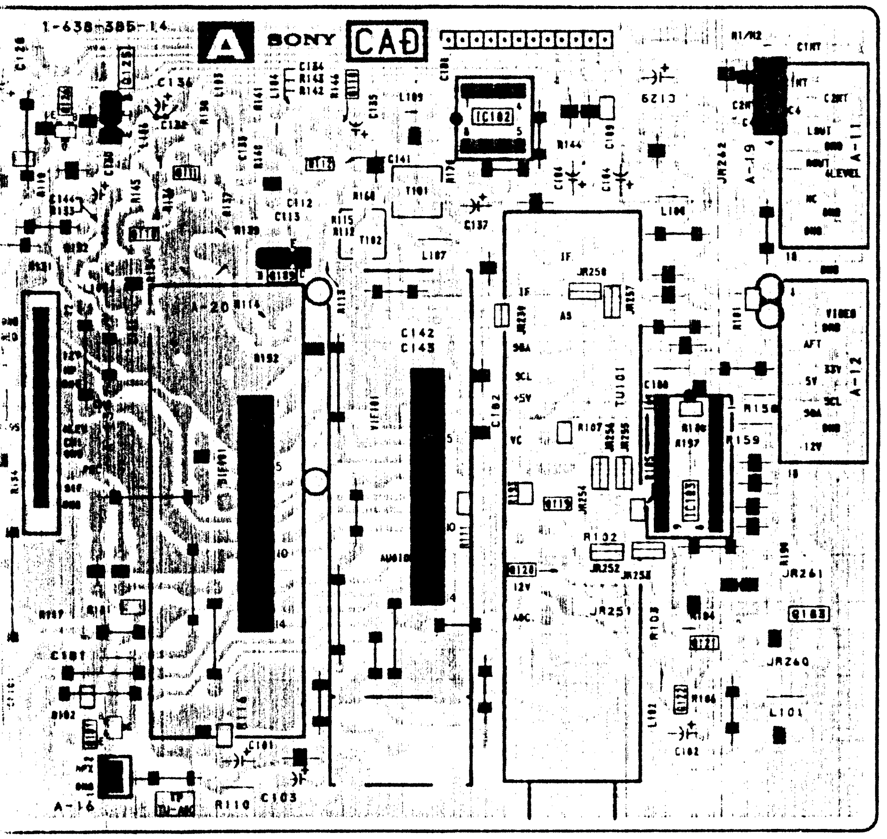
AC IN,
POWER SW

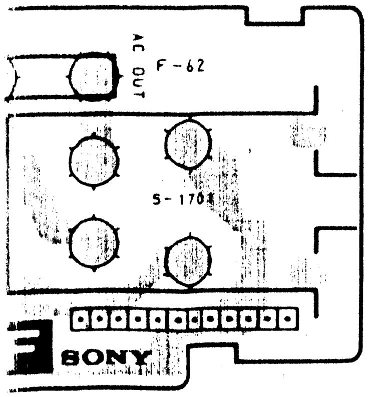
J1 AUDIO CONTROL, AV INPUT, Y/C INPUT, SCART VIDEO OUT, EAST-WEST CORRECTION

H1 CONTROL SW, AV INPUT HEADPHONE

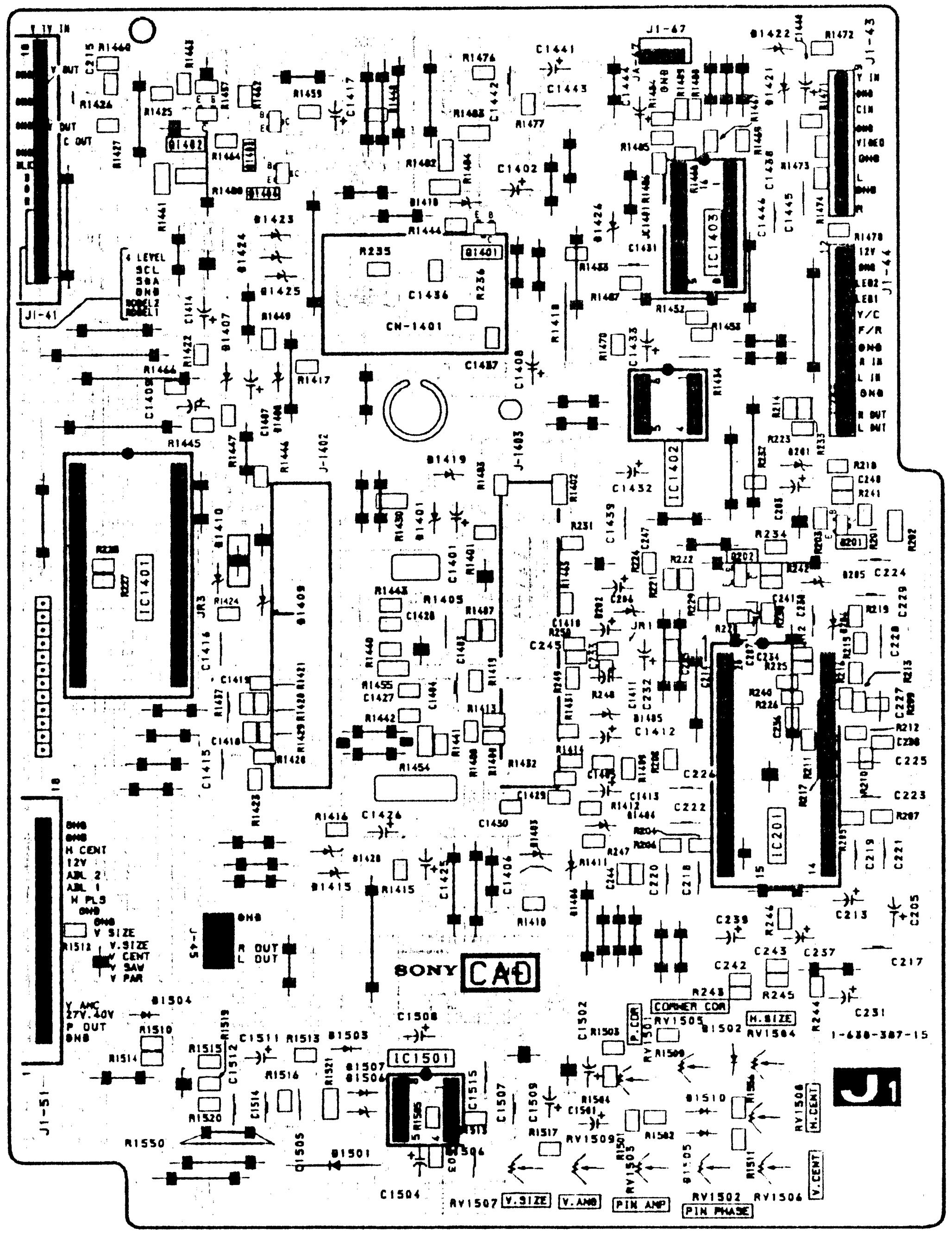
H2 SIRCS, RECEIVER, INDICATOR

VM [VM AMP]

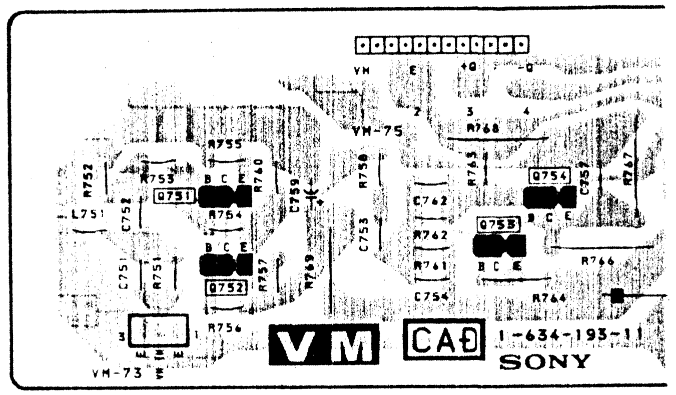

1-638-385-14
A
SONY
CAD
IC102
IC103
TU101
A-11
A-12
A-16
A-19


AC OUT
F-62
S-1704
F
SONY

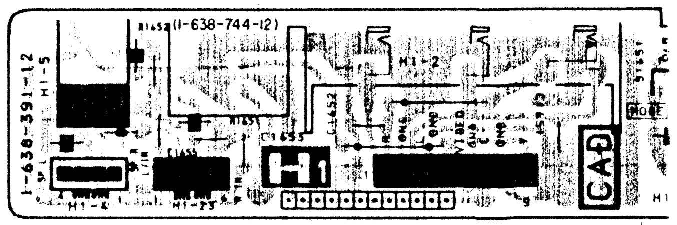
-J1 Board-


J1-41
J1-47
J1-43
J1-44
J1-51
J1-45
IC1401
IC1402
IC1403
IC201
IC1501
CN-1401
SONY
CAD
J1
1-638-387-15
V.SIZE
V.ANG
PIN AMP
PIN PHASE
V.CENT
H.CENT
H.SIZE
CORNER COR

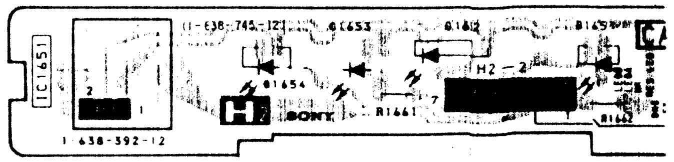
-VM Board- (29 INCH ONLY)


VM-75
VM-73
VM
CAD
1-634-193-11
SONY

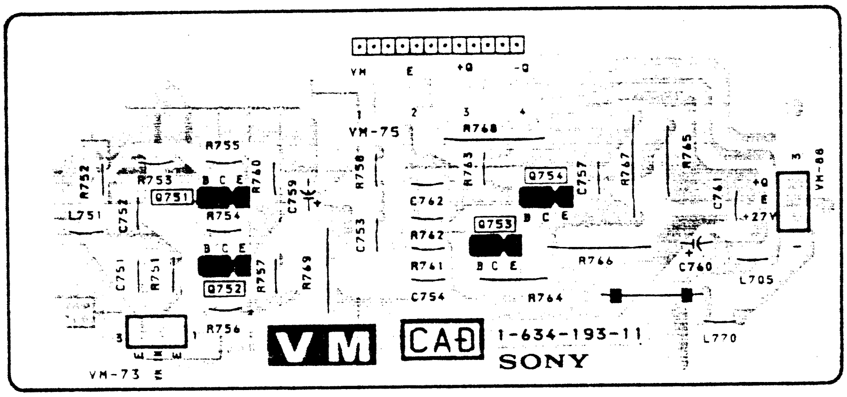
-H1 Board-


(1-638-744-12)
1-638-391-12
H1-5
H1-4
H1-3
H1-2
H1
CAD

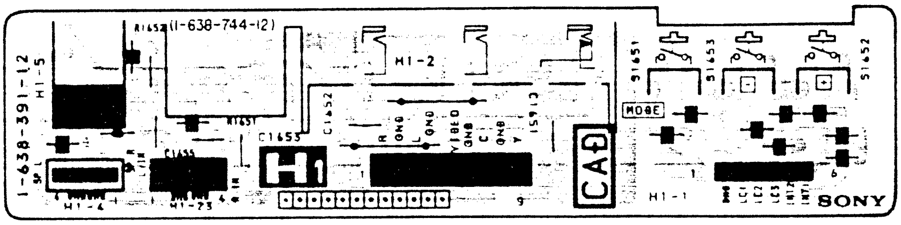
-H2 Board-


(1-638-745-12)
IC1651
H2-2
H2
SONY
1-638-392-12

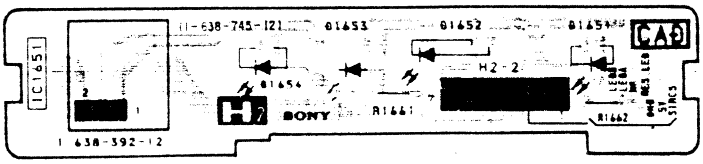
–VM Board– (29 INCH ONLY)

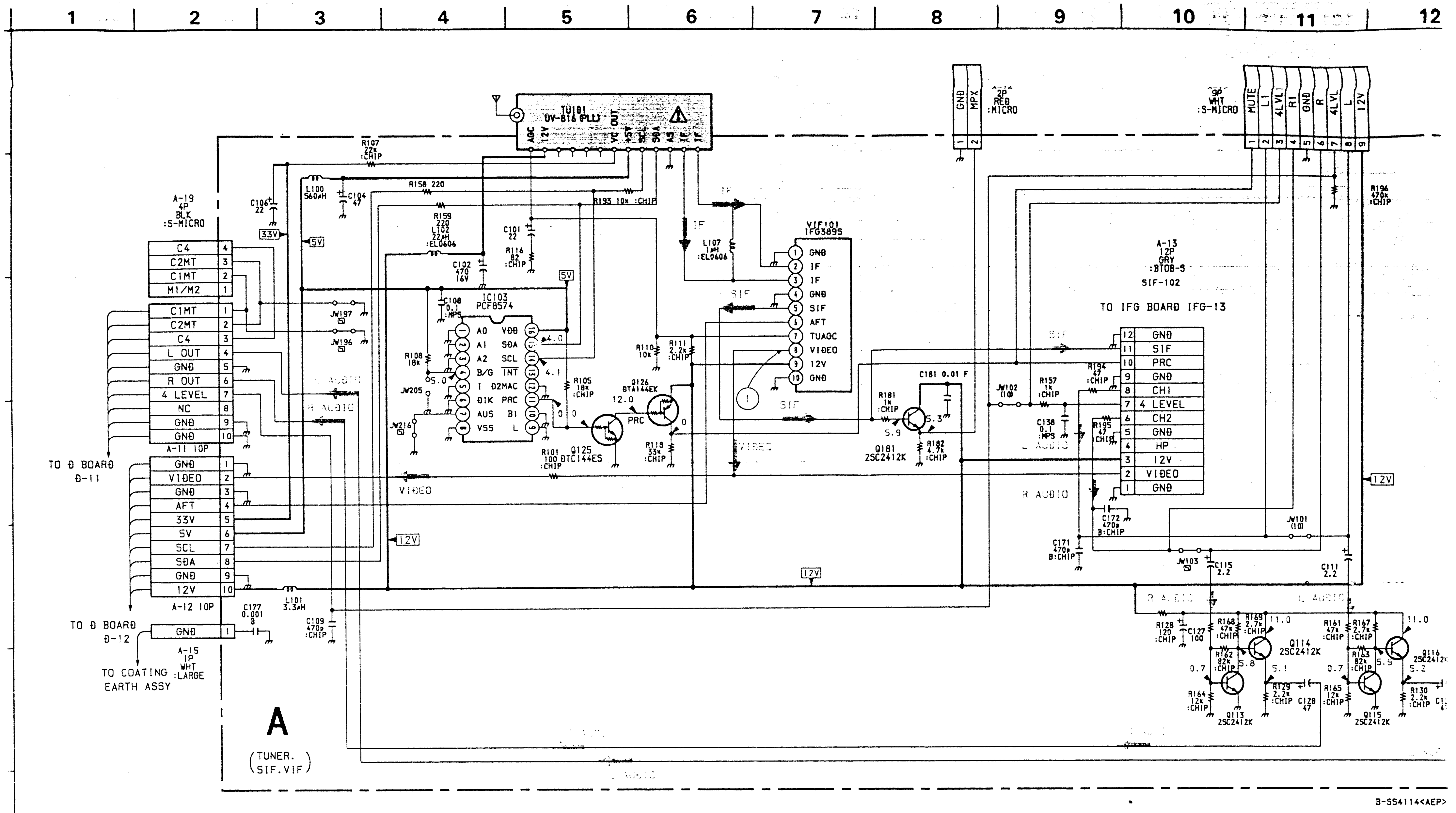

VM
E
+Q
-Q
VM-75
R768
R755
R752
R753
Q751
R760
C759
R758
R763
Q754
C757
R767
R765
VM-88
+Q
E
+27V
L751
C752
R754
C762
Q753
C753
R762
C761
C751
R751
Q752
R757
R769
R741
R766
C760
L705
C754
R764
R756
VM-73
VM
CAD
1-634-193-11
SONY
L770

–H1 Board–


R1652
(1-638-744-12)
1-638-391-12
H1-5
H1-2
S1651
S1653
S1652
C1652
C1651
R1651
C1653
MODE
C1655
SPL
H1-4
H1-73
H1
CAD
H1-1
SONY

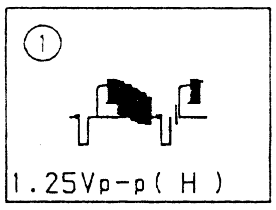
–H2 Board–


(1-638-745-12)
D1653
D1652
D1654
IC1651
D1654
H2-2
H2
SONY
R1661
R1662
CAD
1 638-392-12


A
(TUNER. SIF.VIF)
TU101 UV-816 (PLL)
VIF101 IFG3893
IC103 PCF8574
TO Ə BOARD Ə-11
TO Ə BOARD Ə-12
TO COATING EARTH ASSY
TO IFG BOARD IFG-13
A-19 4P BLK :S-MICRO
A-11 10P
A-12 10P
A-15 1P WHT :LARGE
A-13 12P GRY :BTOB-S SIF-102
Q125 DTC144ES
Q126 DTA144EK
Q181 2SC2412K
Q113 2SC2412K
Q114 2SC2412K
Q115 2SC2412K
Q116 2SC2412K

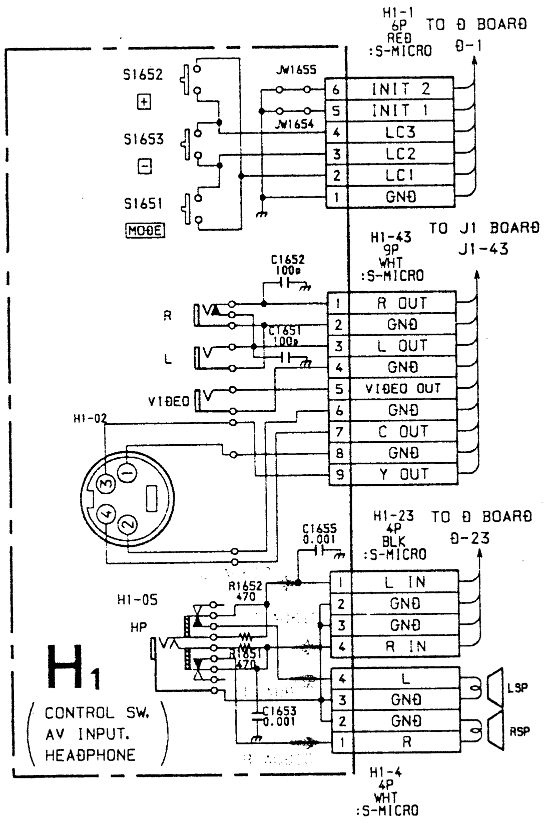
B-SS4114<AEP>

• WAVEFORMS A BOARD



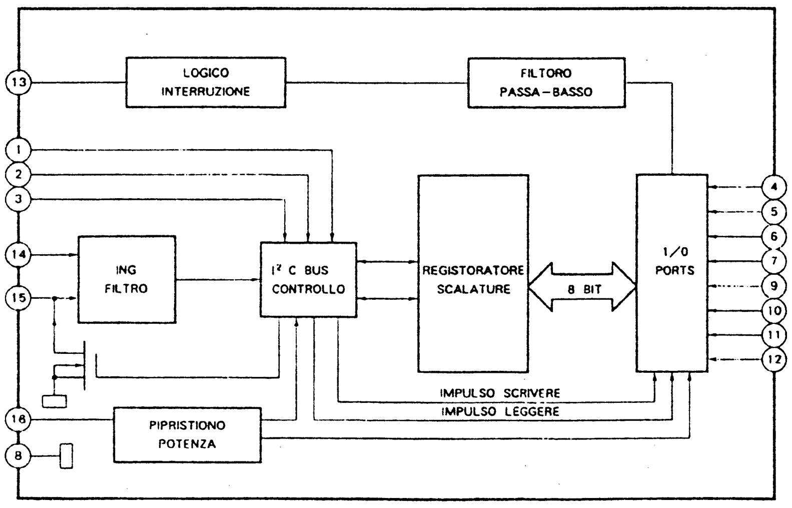
• A BOARD

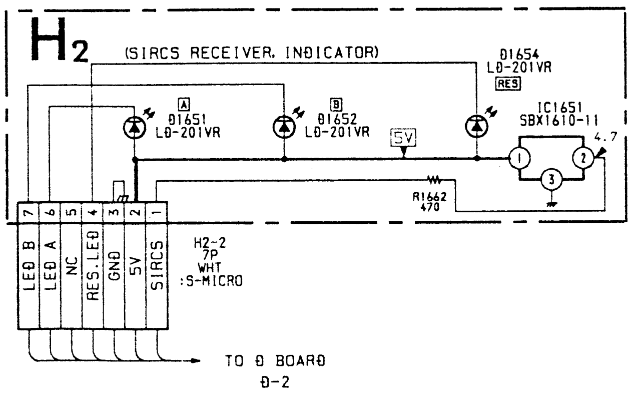
IC103	PCF8574	EXPANDER
Q113	2SC2412K	AUDIO AMP
Q114	2SC2412K	AUDIO AMP
Q115	2SC2412K	AUDIO AMP
Q116	2SC2412K	AUDIO AMP
Q125	DTC144ES	MUTE SW
Q126	DTA144EK	MUTE SW
Q181	2SC2412K	NICAM BUFFER


H1
(CONTROL SW, AV INPUT, HEADPHONE)
H1-1 6P RED :S-MICRO TO Ə BOARD Ə-1
INIT 2
INIT 1
LC3
LC2
LC1
GNƏ
S1652
S1653
S1651 MODE
H1-43 9P WHT :S-MICRO TO J1 BOARD J1-43
R OUT
L OUT
VIDEO OUT
C OUT
Y OUT
H1-23 4P BLK :S-MICRO TO Ə BOARD Ə-23
L IN
R IN
H1-4 4P WHT :S-MICRO
LSP
RSP

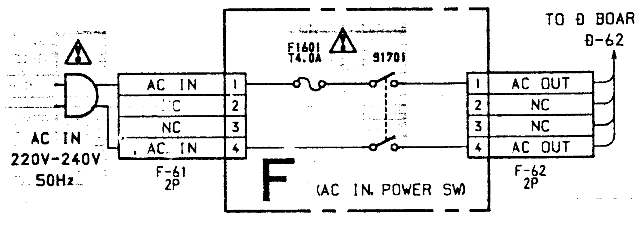
B-SS4114<AEP>-H1.

A BOARD IC103 PCF8574

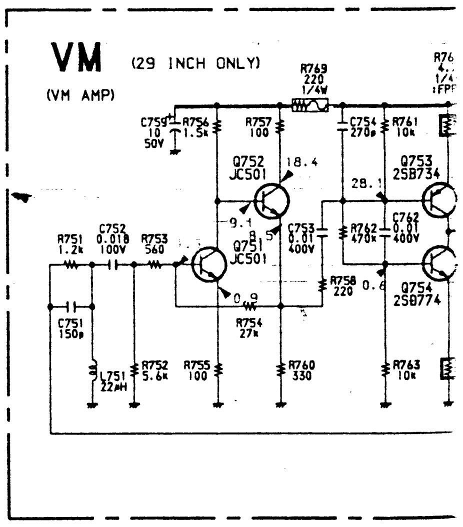

LOGICO INTERRUZIONE
FILTORO PASSA-BASSO
ING FILTRO
I² C BUS CONTROLLO
REGISTORATORE SCALATURE
8 BIT
I/O PORTS
IMPULSO SCRIVERE
IMPULSO LEGGERE
PIPRISTIONO POTENZA


H2
(SIRCS RECEIVER, INDICATOR)
D1651 LD-201VR
D1652 LD-201VR
D1654 LD-201VR
IC1651 SBX1610-11
H2-2 7P WHT :S-MICRO
LED B
LED A
NC
RES.LED
GND
5V
SIRCS
TO Ə BOARD Ə-2

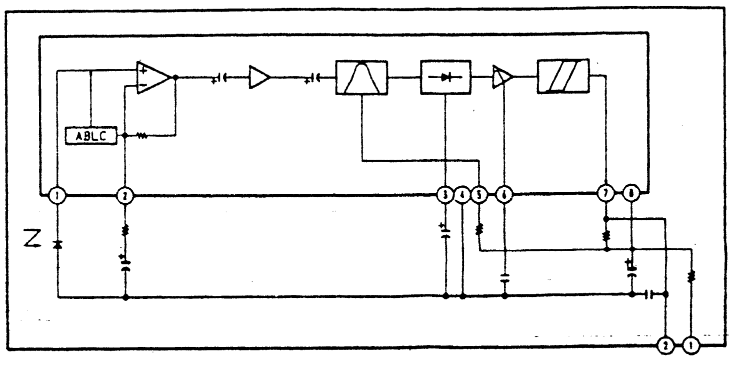
B-SS4114<AEP>-H2.


AC IN 220V-240V 50Hz
F-61 2P
F1601 T4.0A
S1701
F
(AC IN, POWER SW)
F-62 2P
TO Ə BOARD Ə-62
AC IN
NC
AC OUT

B-SS4114<AEP>-F..


VM (29 INCH ONLY)
(VM AMP)
Q751 JC501
Q752 JC501
Q753 2SB734
Q754 2SD774

H2 BOARD IC1651 SBX1610-11

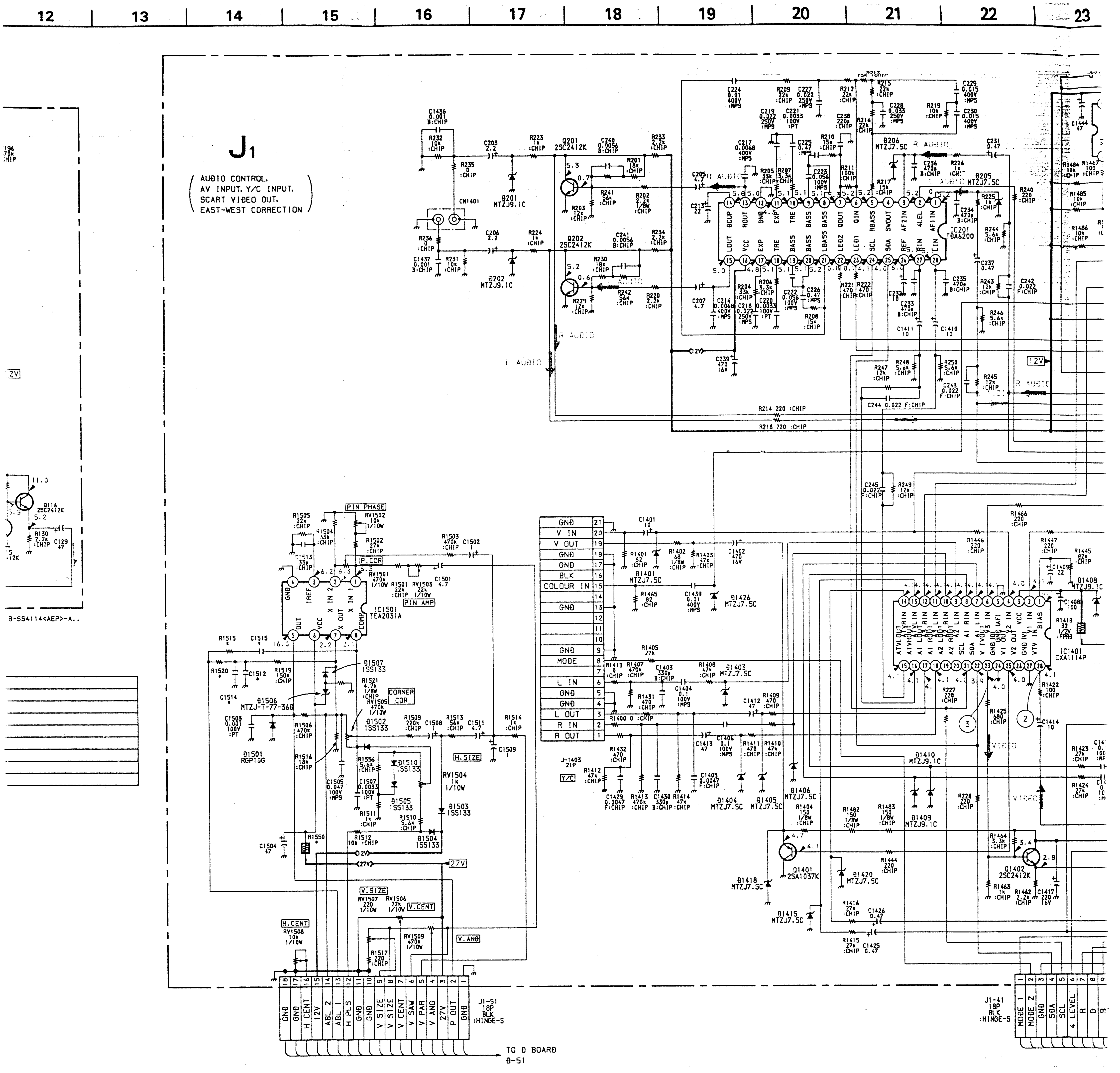


• H2 BOARD

IC1651	SBX1610-11	INFRARED RECIEVER
D1651	LD-201VR	AUDIO CHANNEL A INDICATOR
D1652	LD-201VR	AUDIO CHANNEL B INDICATOR
D1654	LD-201VR	RESET

• VM BOARD (29 INCH ONLY)

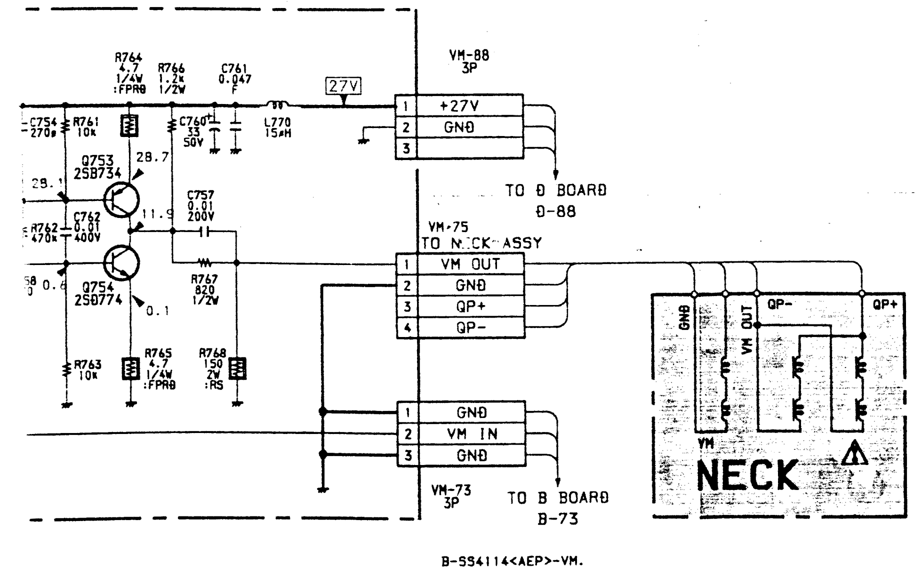
Q751	JC501	REF-AMP
Q752	JC501	REF-AMP
Q753	2SB734	PUSH-PULL OUT
Q754	2SD774	PUSH-PULL OUT


12
13
14
15
16
17
18
19
20
21
22
23
J1
AUDIO CONTROL,
AV INPUT, Y/C INPUT,
SCART VIDEO OUT,
EAST-WEST CORRECTION
IC201 TDA6200
IC1401 CXA1114P
IC1501 TEA2031A
Q201 2SC2412K
Q202 2SC2412K
Q1401 2SA1037K
Q1402 2SC2412K
Q116 2SC2412K
CN1401
J-1403 21P
Y/C
PIN PHASE
P.COR
PIN AMP
CORNER COR
H.SIZE
V.SIZE
V.CENT
V.ANG
H.CENT
R AUDIO
L AUDIO
VIDEO
12V
27V
GND
V IN
V OUT
BLK
COLOUR IN
MODE
L IN
L OUT
R IN
R OUT
H CENT
ABL 2
ABL 1
H PLS
V SIZE
V SAW
V PAR
V ANG
P OUT
J1-51 18P BLK :HINGE-S
TO D BOARD D-51
J1-41 18P BLK :HINGE-S
MODE 1
MODE 2
SDA
SCL
4 LEVEL
R
G
B-SS4114<AEP>-A..

J1 BOARD * MARK

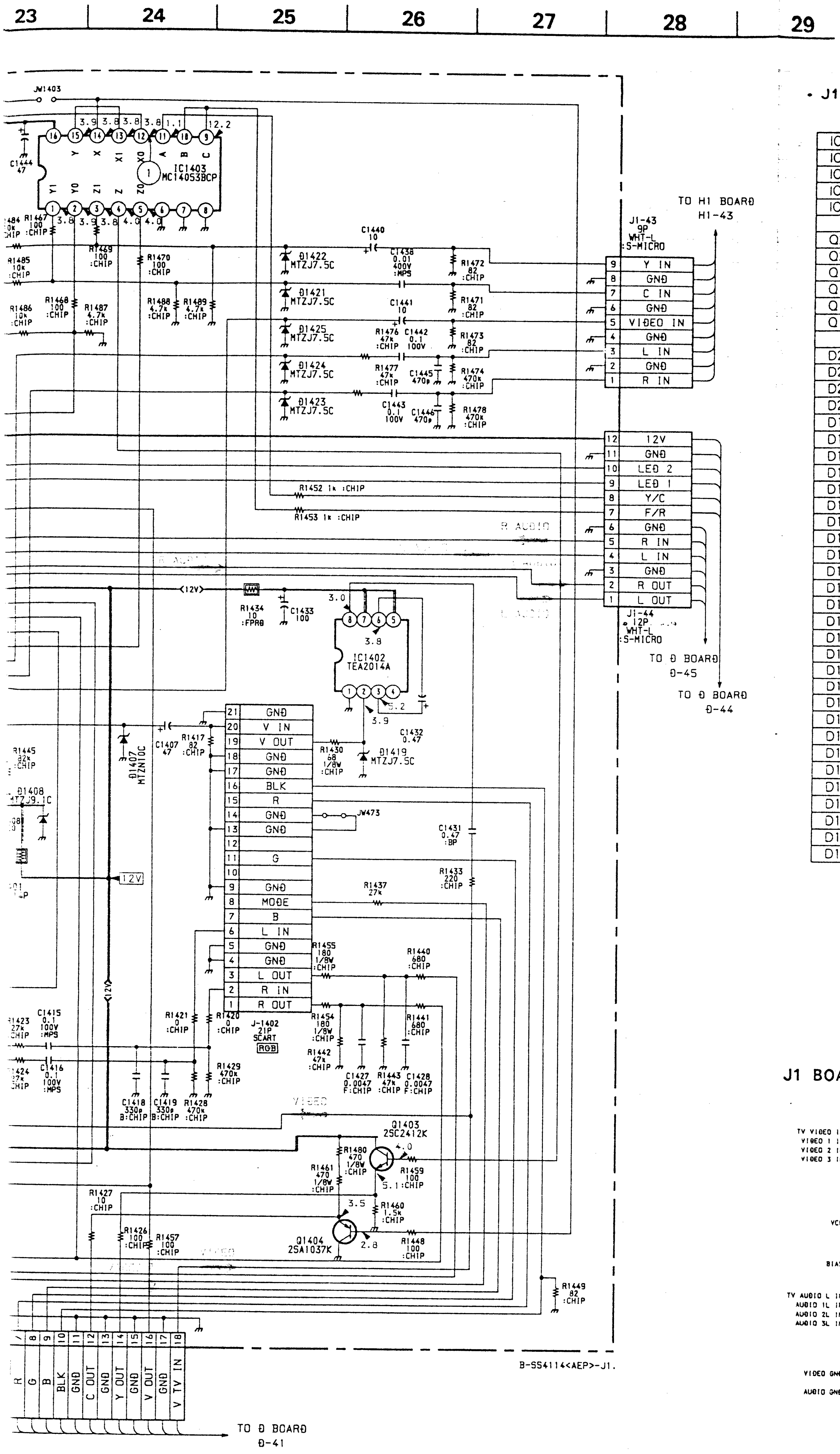
	21″	25″	29″
C1512	0.0068 400V	0.0068 400V	–
C1514	0.0022 250V	0.0068 250V	–
C1515	820P	820P	–
R1515	680K	680K	–
R1520	470K	470K	390K
R1550	JW	JW	1 1W F

– : NOT MOUNTED


VM-88 3P
+27V
GND
27V
TO D BOARD D-88
Q753 2SB734
Q754 2SD774
L770 15μH
VM-75
TO NECK ASSY
VM OUT
GND
QP+
QP-
NECK
VM
GND
VM IN
VM-73 3P
TO B BOARD B-73
B-SS4114<AEP>-VM.

.Y)

IP
IP
ULL OUT
ULL OUT


23
24
25
26
27
28
29
JW1403
IC1403
MC14053BCP
C1444
47
TO H1 BOARD
H1-43
J1-43
9P
WHT-L
:S-MICRO
Y IN
GND
C IN
GND
VIDEO IN
GND
L IN
GND
R IN
D1422
MTZJ7.5C
D1421
MTZJ7.5C
D1425
MTZJ7.5C
D1424
MTZJ7.5C
D1423
MTZJ7.5C
C1440
10
C1438
0.01
400V
:MPS
R1472
82
:CHIP
C1441
10
R1471
82
:CHIP
R1476
47k
:CHIP
C1442
0.1
100V
R1473
82
:CHIP
R1477
47k
:CHIP
C1445
0.1
R1474
470k
:CHIP
C1443
0.1
100V
C1446
470p
R1478
470k
:CHIP
R1485
10k
:CHIP
R1486
10k
:CHIP
R1468
100
:CHIP
R1487
4.7k
:CHIP
R1469
100
:CHIP
R1470
100
:CHIP
R1488
4.7k
:CHIP
R1489
4.7k
:CHIP
12V
GND
LED 2
LED 1
Y/C
F/R
GND
R IN
L IN
GND
R OUT
L OUT
J1-44
12P
WHT-L
:S-MICRO
TO B BOARD
B-45
TO B BOARD
B-44
R1452 1k :CHIP
R1453 1k :CHIP
R AUDIO
L AUDIO
(12V)
R1434
10
:FPRB
C1433
100
IC1402
TEA2014A
3.0
3.8
3.9
5.2
C1432
0.47
R1430
68
1/8W
:CHIP
D1419
MTZJ7.5C
J-1402
21P
SCART
(ROB)
GND
V IN
V OUT
GND
GND
BLK
R
GND
GND
G
GND
MODE
B
L IN
GND
GND
L OUT
R IN
R OUT
R1445
82k
:CHIP
D1408
MTZJ9.1C
D1407
MTZN10C
C1407
47
R1417
82
:CHIP
JW473
C1431
0.47
:BP
R1433
220
:CHIP
R1437
27k
R1455
180
1/8W
:CHIP
R1440
680
:CHIP
R1454
180
1/8W
:CHIP
R1441
680
:CHIP
R1442
47k
:CHIP
C1427
0.0047
F:CHIP
R1443
47k
:CHIP
C1428
0.0047
F:CHIP
C1415
0.1
100V
:MPS
R1423
27k
:CHIP
C1416
0.1
100V
:MPS
R1424
27k
:CHIP
R1421
0
:CHIP
R1420
0
:CHIP
R1429
470k
:CHIP
C1418
330p
B:CHIP
C1419
330p
B:CHIP
R1428
470k
:CHIP
VIDEO
Q1403
2SC2412K
R1480
470
1/8W
:CHIP
R1461
470
1/8W
:CHIP
R1459
100
:CHIP
4.0
5.1
3.5
R1460
1.5k
:CHIP
Q1404
2SA1037K
2.8
R1448
100
:CHIP
R1427
10
:CHIP
R1426
100
:CHIP
R1457
100
:CHIP
R1449
82
:CHIP
R
G
BLK
GND
C OUT
GND
Y OUT
GND
V OUT
GND
V TV IN
TO B BOARD
B-41
B-SS4114<AEP>-J1.

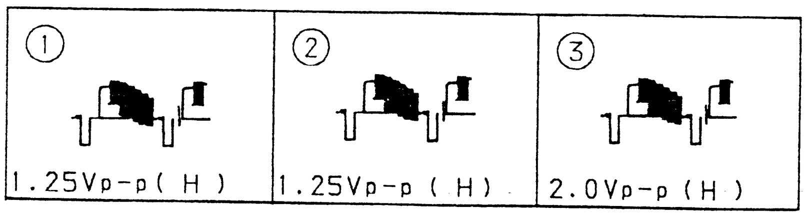
.9"

K

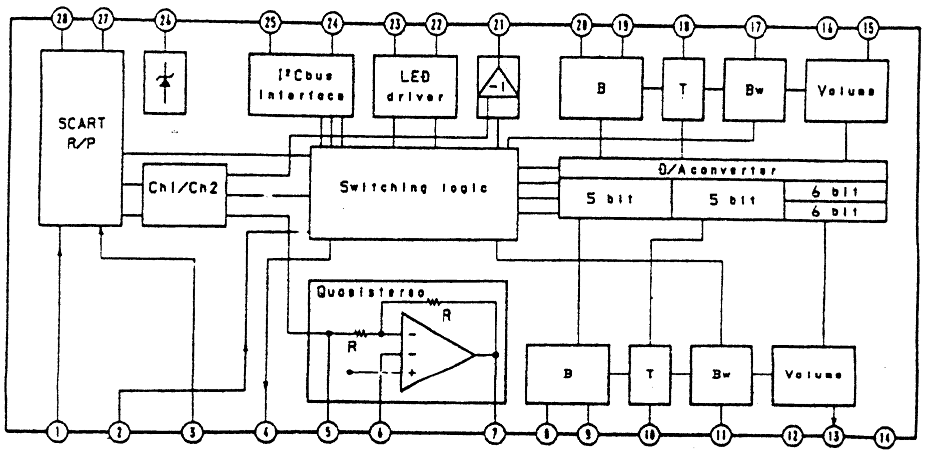
V F

NTED

· WAVEFORMS J1 BOARD



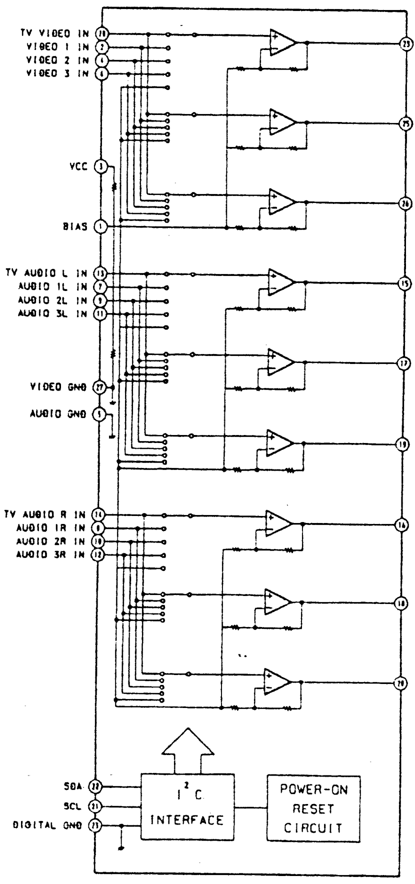
J1 BOARD IC201 TDA6200


SCART
R/P
I²Cbus
Interface
LED
driver
B
T
Bw
Volume
Ch1/Ch2
Switching logic
D/Aconverter
5 bit
5 bit
6 bit
6 bit
Quasistereo
R
R
B
T
Bw
Volume

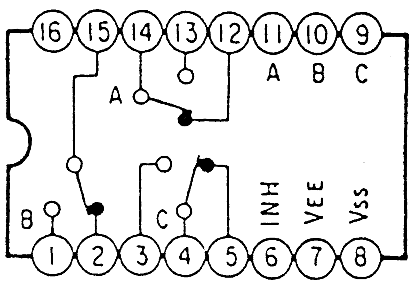
· J1 BOARD

IC201	TDA6200	AUDIO CONTROL
IC1401	CXA1114P	AV SW
IC1402	TEA2014A	SCART VIDEO OUT
IC1403	MC14053BCP	COMPOSITE Y/C SW
IC1501	TEA2031A	EAST-WEST CORRECTION
Q201	2SC24'2K	AUDIO R BUFF
Q202	2SC2412K	AUDIO L BUFF
Q1401	2SA1037K	VIDEO OUT
Q1402	2SC2412K	VIDEO OUT BUFF
Q1403	2SC2412K	Y OUT BUFF
Q1404	2SA1037K	C OUT BUFF
D201	MTZJ9.1C	PROTECT
D202	MTZJ9.1C	PROTECT
D205	MTZJ7.5C	PROTECT
D206	MTZJ7.5C	PROTECT
D1401	MTZJ7.5C	PROTECT
D1403	MTZJ7.5C	PROTECT
D1404	MTZJ7.5C	PROTECT
D1405	MTZJ7.5C	PROTECT
D1406	MTZJ7.5C	PROTECT
D1407	MTZN10C	PROTECT
D1408	MTZJ9.1C	REG
D1409	MTZJ9.1C	PROTECT
D1410	MTZJ9.1C	PROTECT
D1415	MTZJ7.5C	PROTECT
D1418	MTZJ7.5C	PROTECT
D1419	MTZJ7.5C	PROTECT
D1420	MTZJ7.5C	PROTECT
D1421	MTZJ7.5C	PROTECT
D1422	MTZJ7.5C	PROTECT
D1423	MTZJ7.5C	PROTECT
D1424	MTZJ7.5C	PROTECT
D1425	MTZJ7.5C	PROTECT
D1426	MTZJ7.5C	PROTECT
D1501	RGP10G	PROTECT
D1502	1SS133	DECOUPLING H SIZE
D1503	1SS133	CLIPPING V PARABORA
D1504	1SS133	CLIPPING H PULSE
D1505	1SS133	REG
D1506	MTZJ36D	PROTECT
D1507	1SS133	PROTECT
D1510	1SS133	REG

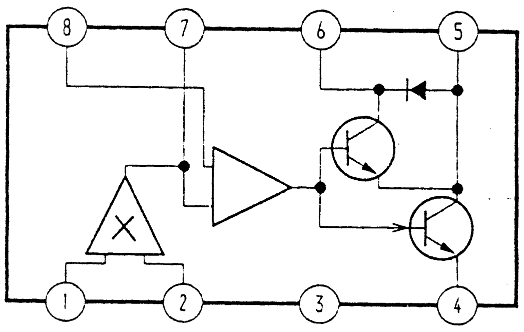
J1 BOARD IC1401 CXA1114P


TV VIDEO IN
VIDEO 1 IN
VIDEO 2 IN
VIDEO 3 IN
VCC
BIAS
TV AUDIO L IN
AUDIO 1L IN
AUDIO 2L IN
AUDIO 3L IN
VIDEO GND
AUDIO GND
TV AUDIO R IN
AUDIO 1R IN
AUDIO 2R IN
AUDIO 3R IN
SDA
SCL
DIGITAL GND
TV VIDEO OUT
VIDEO 1 OUT
VIDEO 2 OUT
TV AUDIO L OUT
AUDIO 1L OUT
AUDIO 2L OUT
TV AUDIO R OUT
AUDIO 1R OUT
AUDIO 2R OUT
I²C
INTERFACE
POWER-ON
RESET
CIRCUIT

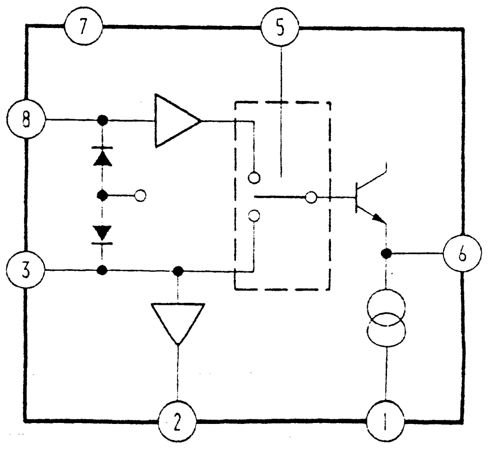
J1 BOARD IC1403 MC14053BCP


16
15
14
13
12
11
10
9
A
B
C
A
B
C
INH
VEE
Vss
1
2
3
4
5
6
7
8

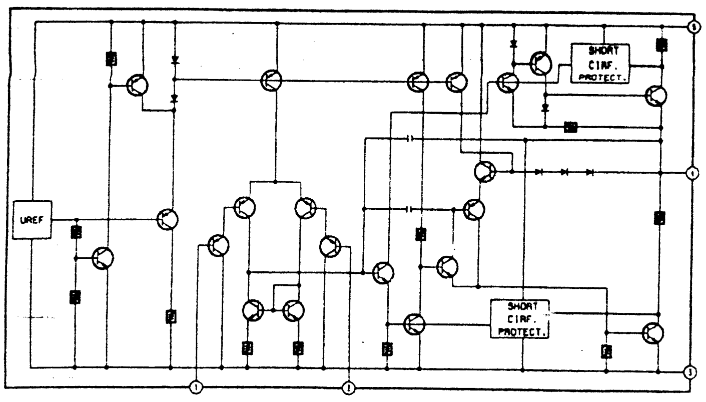
J1 BOARD IC1501 TEA2031A



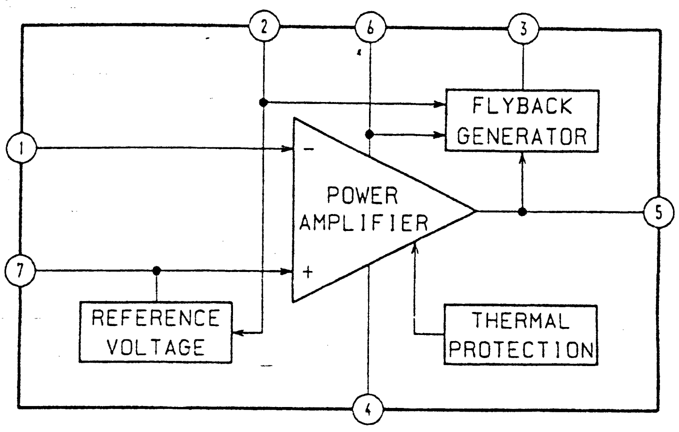
J1 BOARD IC1402 TEA2014A



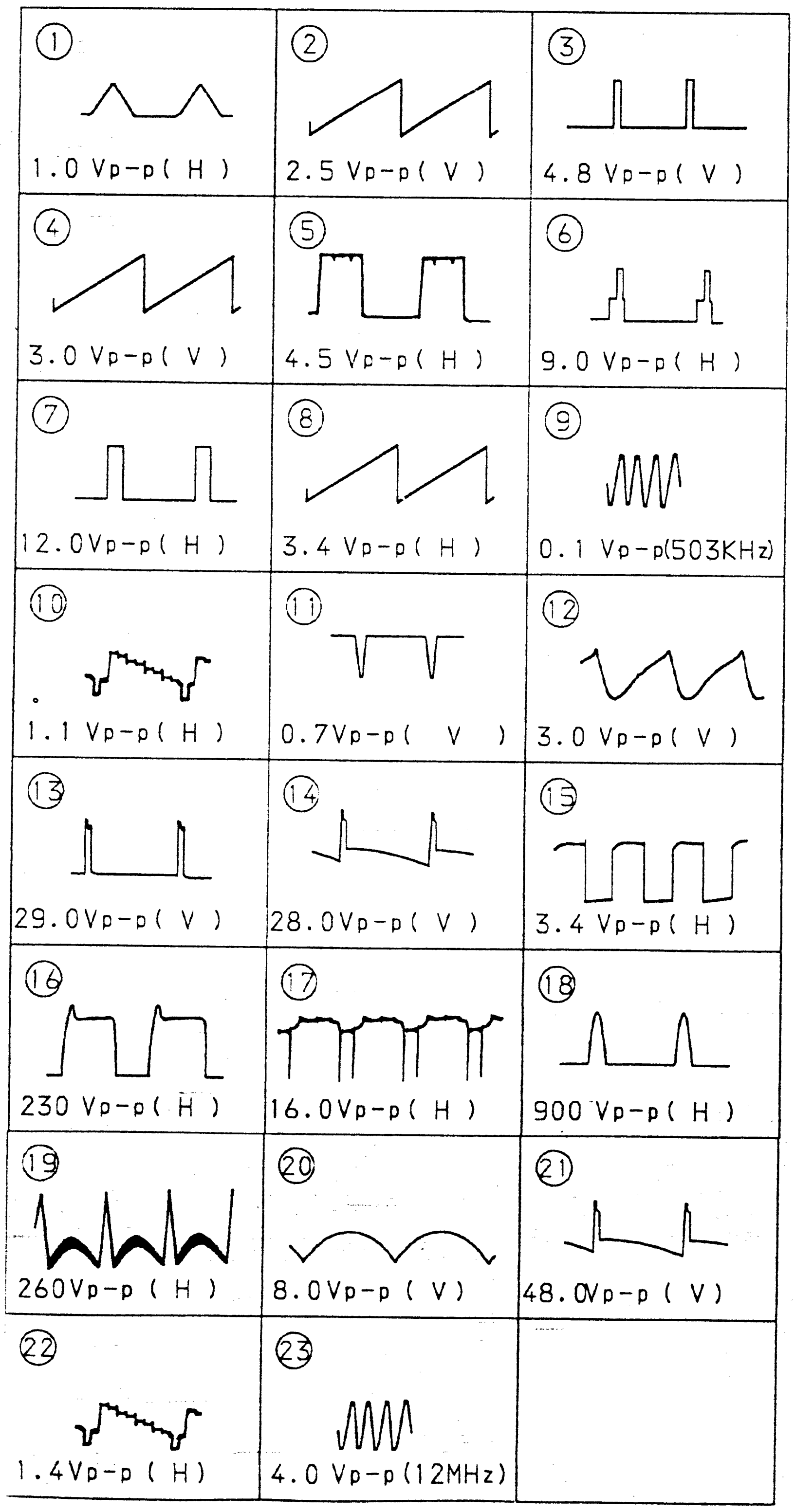
D BOARD IC251/261 TDA2050


UREF
SHORT CIRC. PROTECT.
SHORT CIRC. PROTECT.
1
2
3
4
5

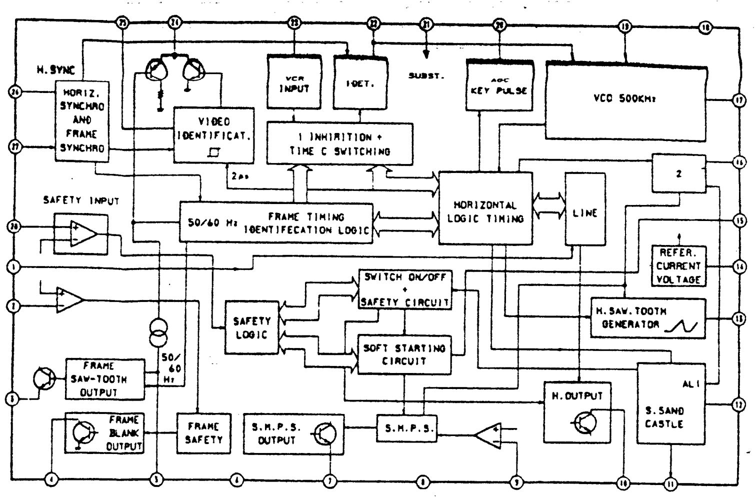
D BOARD IC502 TDA8170


2
6
3
1
7
5
4
FLYBACK GENERATOR
POWER AMPLIFIER
REFERENCE VOLTAGE
THERMAL PROTECTION
-
+

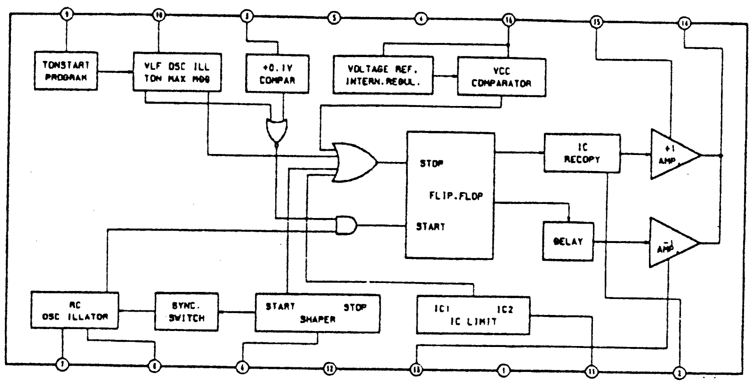
• WAVEFORMS D BOARD



D BOARD IC501 TEA2028B


H. SYNC
HORIZ. SYNCHRO AND FRAME SYNCHRO
VIDEO IDENTIFICAT.
VCR INPUT
IDET.
SUBST.
AGC KEY PULSE
VCO 500KHz
1 INHIBITION + TIME C SWITCHING
2μs
SAFETY INPUT
50/60 Hz FRAME TIMING IDENTIFECATION LOGIC
HORIZONTAL LOGIC TIMING
LINE
2
REFER. CURRENT VOLTAGE
SWITCH ON/OFF + SAFETY CIRCUIT
SAFETY LOGIC
SOFT STARTING CIRCUIT
H. SAW. TOOTH GENERATOR
50/60 Hz
FRAME SAW-TOOTH OUTPUT
FRAME BLANK OUTPUT
FRAME SAFETY
S.M.P.S. OUTPUT
S.M.P.S.
H. OUTPUT
ALI
S. SAND CASTLE

D BOARD IC601 TEA2260


TONSTART PROGRAM
VLF OSC ILL TON MAX MOD
+0.1V COMPAR
VOLTAGE REF. INTERN. REGUL.
VCC COMPARATOR
STOP
FLIP.FLOP
START
IC RECOPY
+1 AMP.
DELAY
-1 AMP.
RC OSC ILLATOR
SYNC. SWITCH
START STOP SHAPER
IC1 IC2 IC LIMIT

D BOARD ＊ MARK

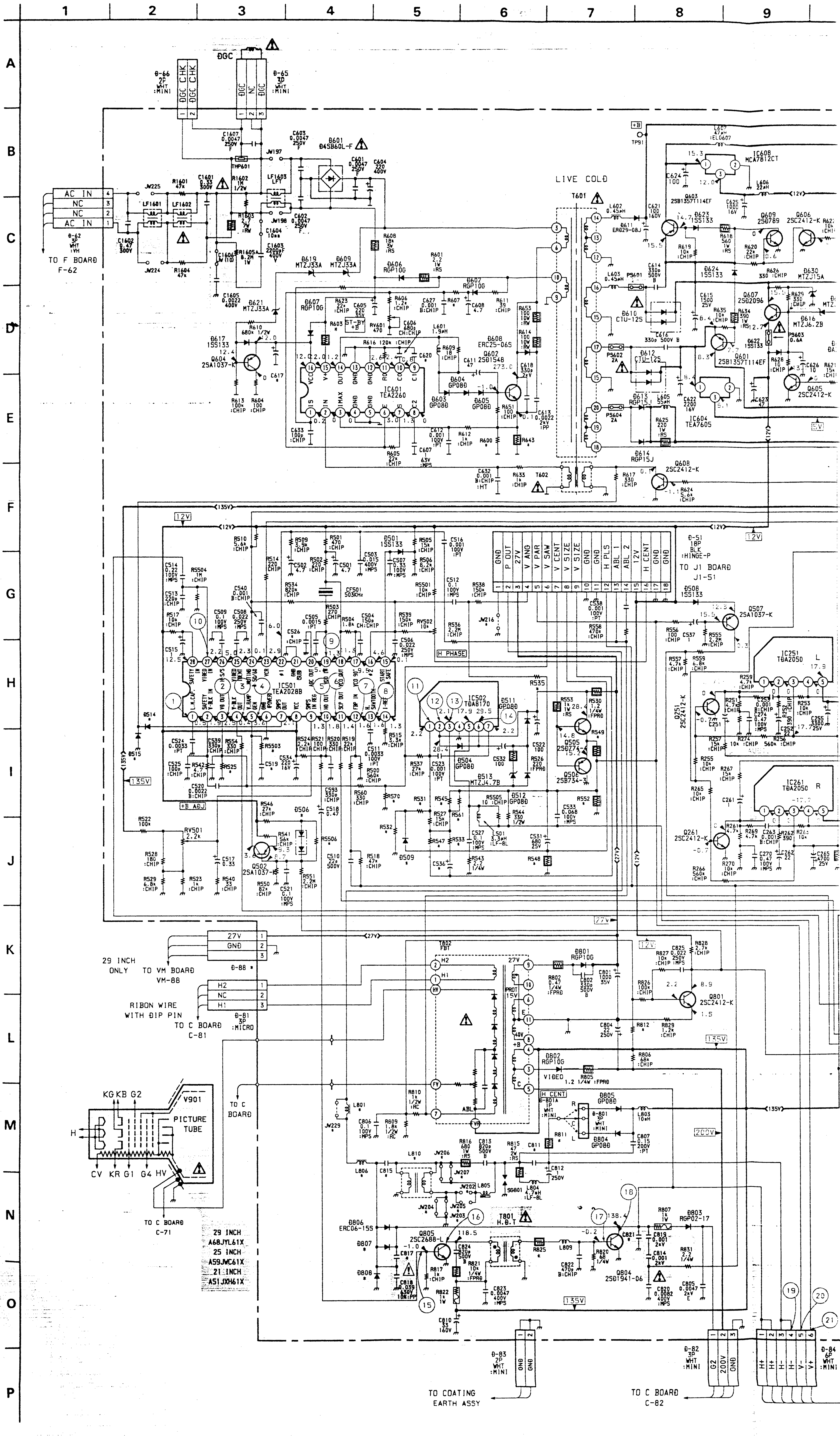
	21″	25″	29″		21″	25″	29″
C519	0.47	0.47	0.33	L806	DCC-H	DRAM CORE (CDI)	HCC DUST CORE 3.9mH
C526	27P	27P	22P				
C536	4.7 16V	10 16V	10 16V	L810	WITH CORE	PMC	PMT
C617	220 25V	100 50V	100 50V				
C620	1 63V	0.47 50V	0.47 50V	R077	1K	–	1K
C811	1 200V	2 200V	2 200V	R525	1K	1K	–
C815	1 200V	1 200V	0.82 200V	R531	–	120K	120K
C817	0.0106 1.4KV	0.015 1.4KV	0.017 1.4KV	R532	–	1K	1K
C821	680P 2KV	680P 2KV	470P 2KV	R533	180	0	0
				R535	4.7M	2.2M	2.2M
D-88	–	–	3P	R545	39K	22K	22K
				R547	5.6K	3.3K	3.3K
D506	DA204K	DA204K	–	R548	1.2 1W F	1 1W F	1 1W F
D509	–	1SS133	1SS133	R549	470 2W F	390 2W F	390 2W F
D514	5mm JW	5mm JW	1SS133	R552	1.2K 1W	–	–
D515	–	–	1SS133	R561	–	–	270K
D807	–	ERC26-15S	ERC06-15S	R570	–	–	680
D808	ERD28-08S	ERD29-08J	ERD29-08J	R600	–	1	1
				R603	15 3W F	12 3W F	12 3W F
JW202	–	–	5mm	R607	4.7K	4.7K	5.6K
JW203	5mm	5mm	–	R631	27K 2W	27K 2W	–
JW204	5mm	5mm	–	R643	0.15 2W F	0.12 2W F	0.12 2W F
JW205	–	–	5mm	R811	100 1W	22 2W F	22 2W F
JW206	5mm	5mm	–	R812	75K 1/2W	68K 1/2W	51K 1/2W
JW207	5mm	5mm	–	R825	1 1W F	0.47 1W F	0.47 1W F
JW216	15mm	15mm	–	R5503	4.7	4.7	10
JW229	10mm	10mm	–	R5506	–	–	12K
L801	–	–	3.9mH				

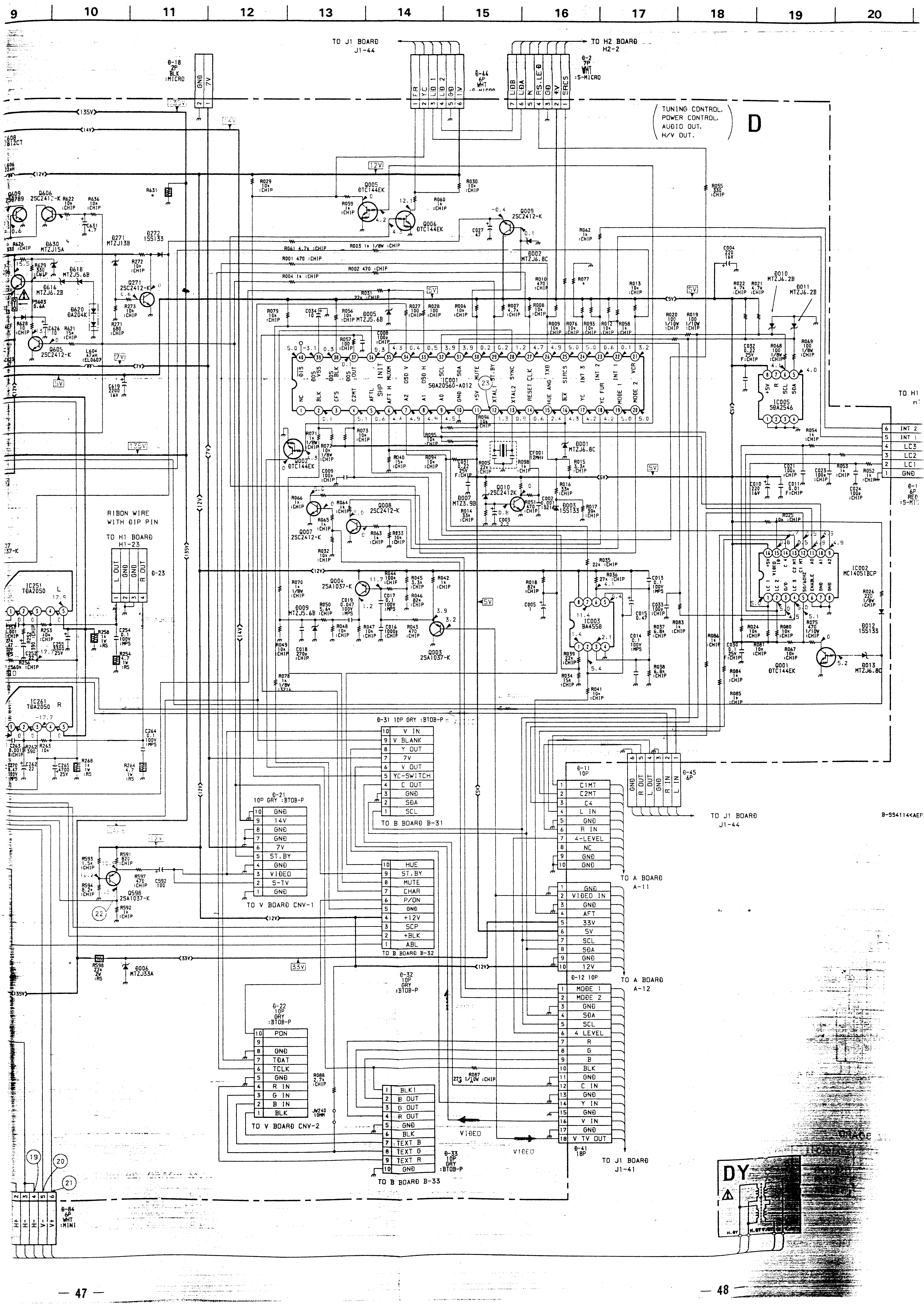
– : NOT MOUNTED

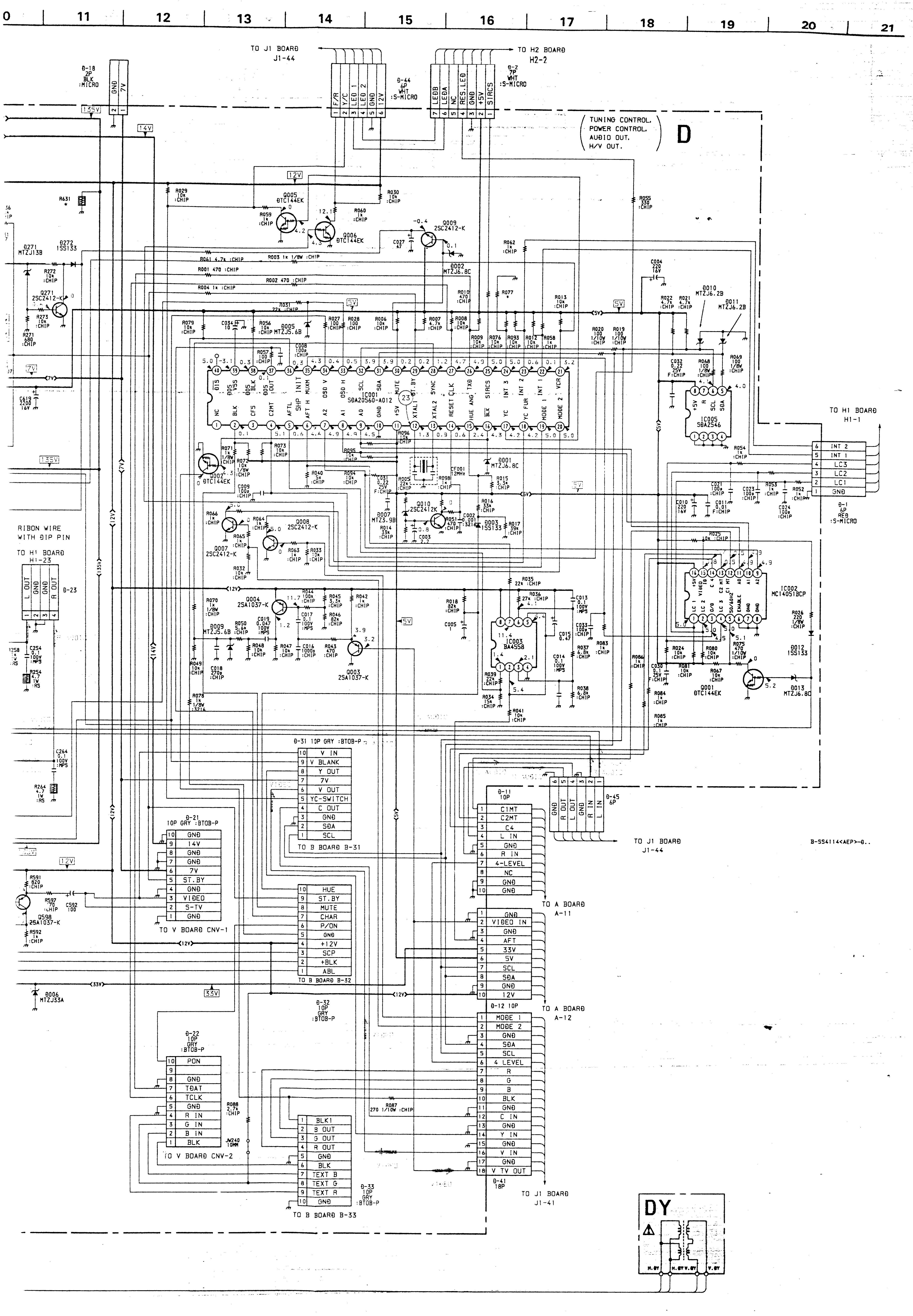
• D BOARD

IC001	SDA20560-A012	TUN
IC002	MC14051BCP	ON S
IC003	BA4558	AFT (
IC005	SDA2546	MY N
IC251	TDA2050	AUDIC
IC261	TDA2050	AUDIC
IC501	TEA2028B	DEFLE
IC502	TDA8170	V OUT
IC601	TEA2260	PRIMA
IC604	TEA7605	+ 5V
IC608	MC7812CT	+ 12V
Q001	DTC144EK	50/6
Q002	DTC144EK	BLK S
Q003	2SA1037K	SYNC
Q004	2SA1037K	SYNC
Q005	DTC144EK	Y/C
Q006	DTC144EK	FRONT
Q007	2SC2412K	MODE
Q008	2SC2412K	MODE
Q009	2SC2412K	MUTE
Q010	2SC2412K	RESET
Q251	2SC2412K	AUDIO
Q261	2SC2412K	AUDO
Q271	2SC2412K	VOLTA
Q502	2SA1037K	CONST
Q505	2SD774-4	V CEN
Q506	2SB734-3	V CEN
Q507	2SA1037K	CANAL
Q598	2SA1037K	VIDEO
Q601	2SB1357T114EF	STBY
Q602	2SD1548	REG O
Q603	2SB1357T114EF	STBY
Q604	2SA1037K	FAST
Q605	2SC2412K	STBY
Q606	2SC2412K	STBY
Q607	2SD2096	+ 12V
Q608	2SC2412K	STBY S
Q609	2SD789-3	STBY S
Q801	2SC2412K	ABL A
Q804	2SD1941-06	H OUT
Q805	2SC2688-L	H DRIV
D001	MTZJ6.8C	PROTEC
D002	MTZJ6.8C	PROTEC
D003	1SS133	HUE CT
D005	MTZJ5.6B	PROT
D006	MTZJ33A	VC VOL
D007	MTZJ3.9B	PLOT F
D009	MTZJ5.6B	CLIPPIN
D010	MTZJ6.2B	PROT
D011	MTZJ6.2B	PROT
D012	1SS133	PROT
D013	MTZJ6.8C	PROT
D271	MTZJ13B	VOLTAG
D272	1SS133	DECOU
D501	1SS133	START
D504	GP08D	V PULS
D506	DA204K	CURREN
D508	1SS133	CANAL
D509	1SS133	V LIN (
D511	GP08D	PROT
D512	GP08D	PROT
D513	MTZJ4.7B	PROT
D514	1SS133	PROT (
D515	1SS133	PROT (
D601	D4SB60L-F	AC REC
D602	RGP10G	REF REC
D603	GP08D	SMPS D
D604	GP08D	SMPS D
D605	GP08D	SMPS D
D606	RGP10G	+ 12V R
D607	RGP10G	REF REC
D608	ERC25-06S	PLUSE C
D609	MTZJ33A	FAST O
D610	CTU-12S	+ 14V R
D611	ERD29-08J	+ 135V
D612	CTU-12S	+ 7V RE
D613	RGP15J	AF V RE
D614	RGP15J	AF V RE
D616	MTZJ6.2B	+ 12V R
D617	1SS133	PROT
D618	MTZJ5.6B	+ 12V R
D619	MTZJ33A	FAST ON
D620	DA204K	+ 12V R
D621	MTZJ33A	FAST ON
D622	1SS133	PROT
D623	1SS133	DECOUPL
D624	1SS133	DECOUPL
D630	MTZJ15A	+ 12V R
D801	RGP10G	+ 27V R
D802	RGP10G	+ 200V
D803	RGP02-17	G2 RECT
D804	GP08D	H CENTE
D805	GP08D	H CENTE
D806	ERC06-15S	H DAMPE
D807	ERC06-15S	H DAMPE
D808	ERD28-08S	PIN DAM
D808	ERD29-08J	PIN DAM

ING CTL
SCREEN DISPLAY
COMPARATOR
MEMORY
IO OUT (L)
IO OUT (R)
LECTION PROCESSOR
UT
MARY SMRS CTL
REG
2V REG
60Hz SW
SW
C SEPARATOR
C SEPARATOR
C SW
NT/REAR SW
E 2 SW
E 1 SW
TE SW
ET
IO MUTE
O MUTE
TAGE DETECT
ISTANT CURRENT SOURCE
ENT
ENT
AL +BLK
EO AMP
Y SW
OUT
Y SW
T ON/OFF
Y SW
Y SW
2V REG
Y SW
Y SW
AMP
UT
RIVER
TECT
TECT
CTL
T
VOLTAGE REGULATION
T RESET
PPING SYNC LEVEL
T
T
T
T
TAGE DETECT
OUPLING MUTE AUDIO
RT
ULSE OUT
RENT (21/25 INCH ONLY)
AL +BLK LEVEL
N (25/29 INCH ONLY)
T
T
T
T (29 INCH ONLY)
T (29 INCH ONLY)
RECT
RECT
S DRIVE 1
S DRIVE 2
S DRIVE 3
V RECT
RECT
SE CLIPPER
T ON/OFF
V RECT
5V RECT
RECT
/ RECT 1
/ RECT 2
V REG
T
V REF
T ON/OFF 2
V REF
T ON/OFF 3
OUPLING STBY
OUPLING STBY
V RECT
V RECT
0V RECT
RECT
ENTER 1
ENTER 2
AMPER 1
AMPER 2 (25/29 INCH ONLY)
DAMPER (21 INCH ONLY)
DAMPER (25/29 INCH ONLY)


1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
DGC
DGC CHK
B-66 2P WHT :MINI
B-65 3P WHT :MINI
AC IN
NC
NC
AC IN
B-62 3P WHT :VH
TO F BOARD F-62
LF1601
LF1602
LF1603 LFT
D601 D4SB60L-F
THP601
LIVE COLD
T601
IC601 TEA2260
IC608 MCA7812CT
IC604 TEA7605
Q604 2SA1037-K
Q602 2SD1548
Q603 2SB1357T114EF
Q609 2SD789
Q606 2SC2412-K
Q607 2SD2096
Q601 2SB1357T114EF
Q605 2SC2412-K
Q608 2SC2412-K
T602
IC501 TEA2028B
IC502 TDA8170
Q502 2SA1037-K
Q505 2SD774
Q506 2SB734
Q507 2SA1037-K
IC251 TDA2050 L
IC261 TDA2050 R
Q251 2SC2412-K
Q261 2SC2412-K
CF501 503KHz
H PHASE
+B ADJ
GND
P OUT
27V
V ANG
V PAR
V SAW
V CENT
V SIZE
H SIZE
GND
GND
H PLS
ABL 1
ABL 2
12V
H CENT
GND
GND
B-51 18P BLK :HINGE-P
TO J1 BOARD J1-51
12V
135V
27V
GND
29 INCH ONLY
TO VM BOARD VM-88
B-88
H2
NC
H1
RIBON WIRE WITH DIP PIN
TO C BOARD C-81
B-81 3P :MICRO
T802 FBT
D801 RGP10G
Q801 2SC2412-K
D802 RGP10G
VIDEO
H CENT
D805 GP08D
D804 GP08D
B-801 3P WHT :MINI
200V
KG KB G2
V901
PICTURE TUBE
H
CV KR G1 G4 HV
TO C BOARD C-71
TO C BOARD
29 INCH A68JYL61X
25 INCH A59JWC61X
21 INCH A51JXH61X
D806 ERC06-15S
Q805 2SC2688-L
T801 H.B.T
Q804 2SD1941-06
D803 RGP02-17
B-83 2P WHT :MINI
GND
GND
TO COATING EARTH ASSY
B-82 3P WHT :MINI
G2
200V
GND
TO C BOARD C-82
B-84 6P WHT :MINI
H+
H+
H-
H-
V-
V+

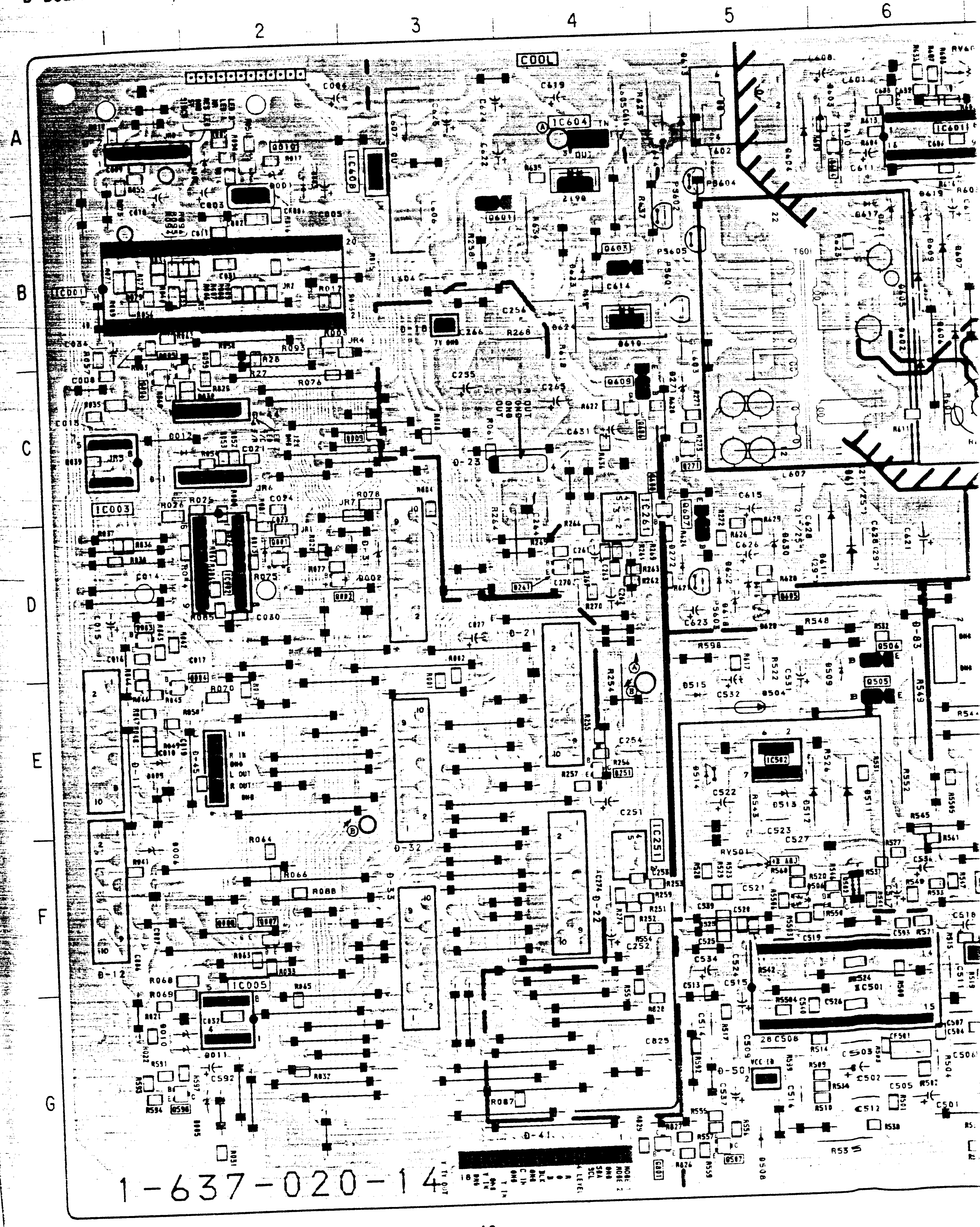

9
10
11
12
13
14
15
16
17
18
19
20
TO J1 BOARD J1-44
TO H2 BOARD H2-2
Ð-18 2P BLK :MICRO
GND
7V
Ð-44 6P WHT :S-MICRO
F.R
Y.C
L.Ð 1
L.Ð 2
GÐ
1V
Ð-2 7P WHT :S-MICRO
LDB
LDA
N
RS.LEÐ
GÐ
+V
SIRCS
TUNING CONTROL,
POWER CONTROL,
AUDIO OUT,
H/V OUT.
D
135V
14V
12V
7V
5V
33V
Q005 DTC144EK
Q006 DTC144EK
Q009 2SC2412-K
Q002 DTC144EK
Q007 2SC2412-K
Q008 2SC2412-K
Q004 2SA1037-K
Q003 2SA1037-K
Q010 2SC2412K
Q001 DTC144EK
D002 MTZJ6.8C
D005 MTZJ5.6B
D007 MTZ3.9B
D009 MTZJ5.6B
D001 MTZJ6.8C
D003 1SS133
D010 MTZJ6.2B
D011 MTZJ6.2B
D012 1SS133
D013 MTZJ6.8C
IC001 SDA20560-A012
CF001 12MHz
IC005 SDA2546
IC003 BA4558
IC002 MC14051BCP
Q609 2SB789
Q606 2SC2412-K
Q605 2SC2412-K
Q271 2SC2412-K
D630 MTZJ15A
D618 MTZJ5.6B
D616 MTZJ6.2B
D620 DA204K
D271 MTZJ13B
D272 1SS133
PS603 0.6A
L604 47μH :EL0607
IC251 TDA2050 L
IC261 TDA2050 R
RIBON WIRE WITH DIP PIN
TO H1 BOARD H1-23
Ð-23
L OUT
GND
GND
R OUT
Q598 2SA1037-K
D006 MTZJ33A
TO H1
INT 2
INT 1
LC3
LC2
LC1
GND
Ð-1 6P RED :S-MICRO
Ð-31 10P GRY :BTOB-P
V IN
V BLANK
Y OUT
7V
V OUT
YC-SWITCH
C OUT
GND
SDA
SCL
TO B BOARD B-31
Ð-21 10P GRY :BTOB-P
GND
14V
GND
GND
7V
ST.BY
GND
VIDEO
S-TV
GND
TO V BOARD CNV-1
HUE
ST.BY
MUTE
CHAR
P/ON
GND
+12V
SCP
+BLK
ABL
TO B BOARD B-32
Ð-32 10P GRY :BTOB-P
Ð-22 10P GRY :BTOB-P
PON
GND
TDAT
TCLK
GND
R IN
G IN
B IN
BLK
TO V BOARD CNV-2
BLK1
B OUT
G OUT
R OUT
GND
BLK
TEXT B
TEXT G
TEXT R
GND
Ð-33 10P GRY :BTOB-P
TO B BOARD B-33
VIDEO
VIDEO
Ð-45 6P
GND
R OUT
L OUT
GND
R IN
L IN
TO J1 BOARD J1-44
Ð-11 10P
C1MT
C2MT
C4
L IN
GND
R IN
4-LEVEL
NC
GND
GND
TO A BOARD A-11
GND
VIDEO IN
GND
AFT
33V
5V
SCL
SDA
GND
12V
Ð-12 10P
TO A BOARD A-12
MODE 1
MODE 2
GND
SDA
SCL
4 LEVEL
R
G
B
BLK
GND
C IN
GND
Y IN
GND
V IN
GND
V TV OUT
Ð-41 18P
TO J1 BOARD J1-41
Ð-84 6P WHT :MINI
H+
H+
H-
V-
V+
19
20
21
22
23
B-SS4114<AEP
DY



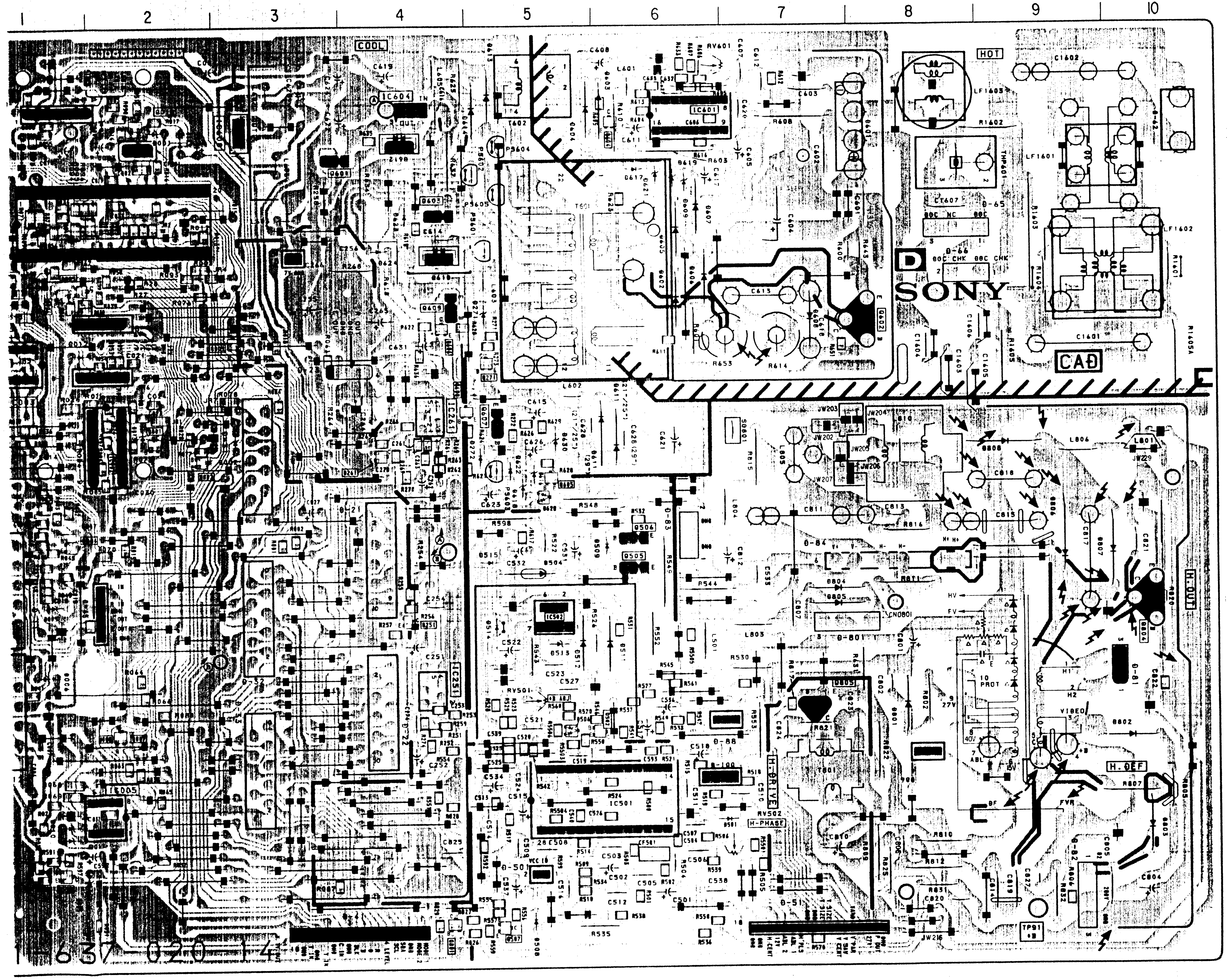
10
11
12
13
14
15
16
17
18
19
20
21
TO J1 BOARD J1-44
TO H2 BOARD H2-2
0-18 2P BLK :MICRO
GND
7V
0-44 6P WHT :S-MICRO
F/R
Y/C
LED 1
LED 2
GND
12V
LEDB
LEDA
NC
RES.LED
GND
+5V
SIRCS
0-2 7P WHT :S-MICRO
TUNING CONTROL, POWER CONTROL, AUDIO OUT, H/V OUT
D
135V
14V
12V
5V
7V
33V
R631
R029 10k :CHIP
Q005 DTC144EK
R030 10k :CHIP
R059 1k :CHIP
Q006 DTC144EK
R060 1k :CHIP
Q009 2SC2412-K
C027 47
R055 330 :CHIP
D271 MTZJ13B
D272 1SS133
R272 10k :CHIP
Q271 2SC2412-K
R273 10k :CHIP
R271 680 :CHIP
C619 2200 16V
R061 4.7k :CHIP
R003 1k 1/8W :CHIP
R001 470 :CHIP
R002 470 :CHIP
R004 1k :CHIP
D002 MTZJ6.8C
R062 1k :CHIP
C004 220 16V
R010 470 :CHIP
R077
R013 10k :CHIP
R022 4.7k :CHIP
R021 4.7k :CHIP
D010 MTZJ6.2B
D011 MTZJ6.2B
R031 22k :CHIP
R079 10k :CHIP
C034 10
R056 10k :CHIP
D005 MTZJ5.6B
R027 100 :CHIP
R028 100 :CHIP
R006 10k :CHIP
R007 4.7k :CHIP
R008 10k :CHIP
R009 10k :CHIP
R076 10k :CHIP
R093 10k :CHIP
R012 10k :CHIP
R058 1k :CHIP
R020 100 1/10W :CHIP
R019 100 1/10W :CHIP
R057 100 :CHIP
C008 100p :CHIP
C032 0.22 25V F:CHIP
R068 100 1/8W :CHIP
R069 100 1/8W :CHIP
IC001 SDA20S60-A012
DTS
VSS
OSD BLK
OSD OUT
SHP INIT
MUXH
OSD V
OSD H
SCL
SDA
MUTE
ST.BY
SYNC
CLK
TXD
SIRCS
INT 3
INT 2
INT 1
VCR
NC
BLK
CF5
C2MT
AFTL
AFT H
A2
A1
A0
GND
+5V
XTAL1
XTAL2
RESET
HUE ANG
BLK
YC
YC FUR
MODE 1
MODE 2
IC005 SDA2546
+5V
R
SCL
SDA
TO H1 BOARD H1-1
INT 2
INT 1
LC3
LC2
LC1
GND
0-1 6P RED :S-MICRO
R071 1k 1/8W :CHIP
R072 10k 1/8W :CHIP
R073 10k :CHIP
Q002 DTC144EK
R096 10k :CHIP
R095 10k :CHIP
D001 MTZJ6.8C
R040 5k :CHIP
R094 10k :CHIP
C031 0.22 25V F:CHIP
R005 22k :CHIP
CF001 12MHz
R098 1k :CHIP
R015 3.3k :CHIP
C009 100p :CHIP
R054 1k :CHIP
C021 100p :CHIP
C023 100p :CHIP
R053 1k :CHIP
R052 1k :CHIP
C010 220 16V
C011 0.01 F:CHIP
C024 100p :CHIP
R066 1k :CHIP
R064 1k :CHIP
Q008 2SC2412-K
R065 1k :CHIP
Q007 2SC2412-K
D007 MTZ3.9B
Q010 2SC2412K
R016 33k :CHIP
R051 470 :CHIP
C002 0.001 3216
D003 1SS133
R017 39k :CHIP
R014 33k :CHIP
C003 2.2
R063 1k :CHIP
R033 10k :CHIP
R025 10k :CHIP
R032 10k :CHIP
R035 22k :CHIP
IC002 MC14051BCP
R026 220 1/8W :CHIP
RIBON WIRE WITH 0IP PIN
TO H1 BOARD H1-23
L OUT
GND
GND
R OUT
0-23
R070 1k 1/8W :CHIP
Q004 2SA1037-K
R044 100k :CHIP
R045 3.3k :CHIP
R042 1k :CHIP
R036 27k :CHIP
C013 0.1 100V :MPS
R018 82k :CHIP
C019 0.047 100V :MPS
C017 0.1 100V :MPS
R046 82k :CHIP
C005 1
C033 100p :CHIP
C015 0.47
IC003 BA4558
D009 MTZJ5.6B
R050 5.6k :CHIP
R048 10k :CHIP
R047 10k :CHIP
C016 1000p :CHIP
R043 470 :CHIP
Q003 2SA1037-K
C014 0.1 10V :MPS
R037 6.8k :CHIP
R083 1k :CHIP
R024 10k :CHIP
R080 10k :CHIP
R075 470 1/10W :CHIP
D012 1SS133
R258
C254 0.1 100V :MPS
R254 4.7 1W :RS
R049 10k :CHIP
C018 270p :CHIP
R039 22k :CHIP
R034 15k :CHIP
R038 6.8k :CHIP
R086 1k :CHIP
C030 0.1 25V F:CHIP
R081 10k :CHIP
R067 10k :CHIP
Q001 DTC144EK
D013 MTZJ6.8C
R078 1k 1/8W :3216
R041 10k :CHIP
R084 1k :CHIP
R085 1k :CHIP
0-31 10P GRY :BTOB-P
V IN
V BLANK
Y OUT
7V
V OUT
YC-SWITCH
C OUT
GND
SDA
SCL
TO B BOARD B-31
C264 0.1 100V :MPS
R264 4.7 1W :RS
0-11 10P
C1MT
C2MT
C4
L IN
GND
R IN
4-LEVEL
NC
GND
GND
R OUT
L OUT
R IN
L IN
0-45 6P
TO J1 BOARD J1-44
B-SS4114<AEP>-0..
0-21 10P GRY :BTOB-P
GND
14V
GND
GND
7V
ST.BY
GND
VIDEO
S-TV
GND
TO V BOARD CNV-1
R591 820 :CHIP
R597 470 :CHIP
C592 100
Q598 2SA1037-K
R592 1k :CHIP
TO A BOARD A-11
HUE
ST.BY
MUTE
CHAR
P/ON
GND
+12V
SCP
+BLK
ABL
TO B BOARD B-32
GND
VIDEO IN
GND
AFT
33V
5V
SCL
SDA
GND
12V
D006 MTZJ33A
0-32 10P GRY :BTOB-P
0-12 10P
TO A BOARD A-12
MODE 1
MODE 2
GND
SDA
SCL
4 LEVEL
R
G
B
BLK
GND
C IN
GND
Y IN
GND
V IN
GND
V TV OUT
0-41 18P
TO J1 BOARD J1-41
0-22 10P GRY :BTOB-P
PON
GND
TOAT
TCLK
GND
R IN
G IN
B IN
BLK
TO V BOARD CNV-2
R088 2.7k :CHIP
JW240 10MM
R087 270 1/10W :CHIP
BLK1
B OUT
G OUT
R OUT
GND
BLK
TEXT B
TEXT G
TEXT R
GND
0-33 10P GRY :BTOB-P
TO B BOARD B-33
DY
⚠
H.DY
H.DY
V.DY
V.DY

D [TUNING CONTROL, POWER CONTROL, AUDIO OUT, H/V OUT]

—D Board—


1
2
3
4
5
6
A
B
C
D
E
F
G
COOL
IC604
IC608
IC601
IC001
IC003
IC005
IC261
IC251
IC502
IC501
T601
L607
D-21
D-22
D-23
D-31
D-32
D-33
D-41
D-45
D-50
D-83
RV501
1-637-020-14

UNING CONTROL, POWER CONTROL,
UDIO OUT, H/V OUT


1
2
3
4
5
6
7
8
9
10
COOL
HOT
IC604
IC601
LF1603
LF1601
LF1602
C1602
C1601
T601
SONY
CAD
E
H-OUT
H.DEF
H-DRIVE
RV502
H-PHASE
IC502
IC501
IC251
IC261
IC005
TP91
1-637-020-14

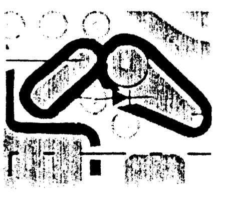
IC	
IC001	B – 2
IC002	C – 2
IC003	C – 1
IC005	G – 2
IC251	F – 4
IC261	D – 4
IC501	G – 6
IC502	E – 5
IC601	A – 6
IC604	A – 4
IC608	A – 3

TRANSISTOR	
Q001	C – 2
Q002	C – 2
Q003	D – 1
Q004	D – 4
Q005	C – 1
Q006	C – 1
Q007	F – 2
Q008	F – 2
Q009	C – 3
Q010	A – 2
Q251	E – 4
Q271	C – 5
Q502	F – 5
Q505	E – 6
Q506	D – 6
Q507	G – 4
Q598	G – 1
Q601	B – 3
Q602	C – 8
Q603	B – 4
Q604	A – 6
Q605	D – 5
Q606	C – 4
Q607	D – 5
Q608	C – 4
Q609	C – 4
Q801	G – 4
Q804	E – 10
Q805	F – 7

DIODE	
D001	A – 2
D002	D – 3
D003	A – 2
D005	G – 1
D006	F – 1
D007	A – 2
D009	E – 1
D010	G – 1
D011	G – 1
D012	C – 1
D013	D – 2
D271	C – 5
D272	D – 5
D501	G – 7
D504	E – 5
D506	F – 5
D508	G – 5
D509	F – 5
D511	E – 6
D512	E – 5
D513	E – 5
D514	E – 5
D515	E – 5
D601	A – 8
D602	C – 6
D603	A – 5
D604	A – 4
D605	B – 6
D606	B – 6
D607	B – 6
D608	C – 7
D609	B – 6
D610	B – 4
D611	D – 6
D612	A – 4
D613	A – 5
D614	A – 5
D616	D – 5
D617	B – 6
D618	D – 5
D619	B – 6
D620	D – 5
D621	B – 6
D622	D – 5
D623	B – 4
D624	B – 4
D630	D – 5
D801	F – 8
D802	F – 10
D803	G – 10
D804	E – 7
D805	E – 7
D806	E – 9
D807	E – 10
D808	D – 9

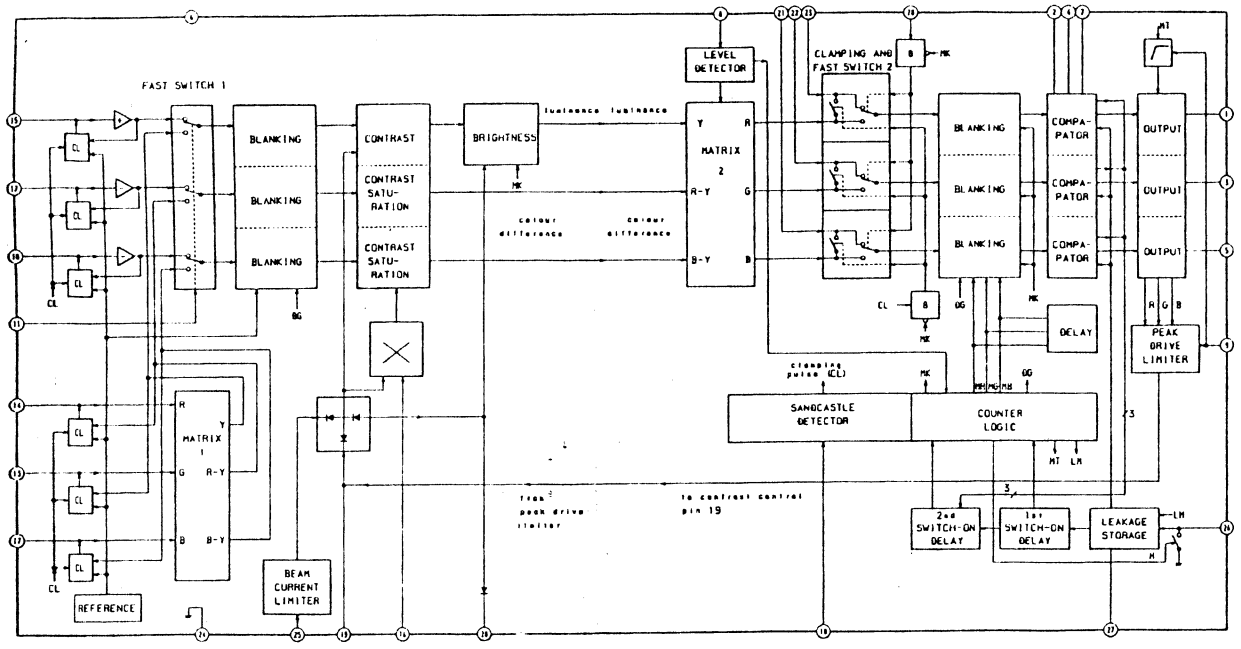
VARIABLE RESISTOR	
RV501	F – 5
RV502	G – 7
RV601	A – 6

TP	
TP91	G – 9

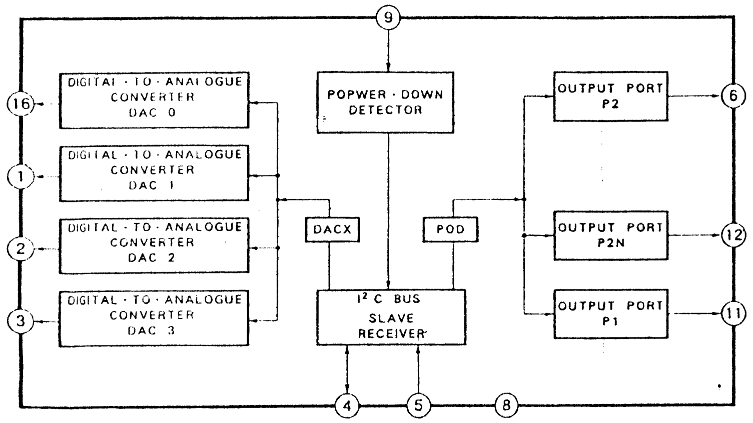


NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

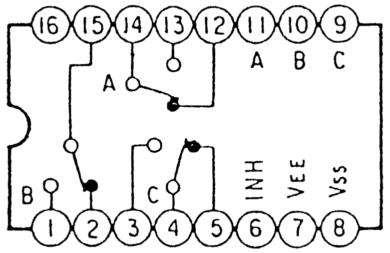
B BOARD IC301 TDA4580-V7


FAST SWITCH 1
CL
BLANKING
BLANKING
BLANKING
BG
CONTRAST
CONTRAST SATU-RATION
CONTRAST SATU-RATION
BRIGHTNESS
MK
luminance luminance
colour difference colour difference
MATRIX 1
R
Y
G
R-Y
B
B-Y
REFERENCE
BEAM CURRENT LIMITER
from peak drive limiter
to contrast control pin 19
LEVEL DETECTOR
MATRIX 2
Y R
R-Y G
B-Y B
CLAMPING AND FAST SWITCH 2
B
CL
BLANKING
BLANKING
BLANKING
DG
COMPA-PATOR
COMPA-PATOR
COMPA-PATOR
OUTPUT
OUTPUT
OUTPUT
MT
R G B
PEAK DRIVE LIMITER
DELAY
clamping pulse (CL)
SANDCASTLE DETECTOR
COUNTER LOGIC
MR MG MB
MT LM
3
2nd SWITCH-ON DELAY
1st SWITCH-ON DELAY
LEAKAGE STORAGE
LM
H
6
8
21
22
23
20
2
4
7
15
17
18
11
14
13
12
1
3
5
9
26
24
25
19
16
28
10
27

B BOARD IC302 TDA8442-N3


9
16
1
2
3
DIGITAL-TO-ANALOGUE CONVERTER DAC 0
DIGITAL-TO-ANALOGUE CONVERTER DAC 1
DIGITAL-TO-ANALOGUE CONVERTER DAC 2
DIGITAL-TO-ANALOGUE CONVERTER DAC 3
POPWER-DOWN DETECTOR
DACX
POD
I²C BUS SLAVE RECEIVER
OUTPUT PORT P2
OUTPUT PORT P2N
OUTPUT PORT P1
6
12
11
4
5
8

B BOARD IC303 MC14053BCP


16
15
14
13
12
11
10
9
A B C
A
B
C
INH
VEE
Vss
1
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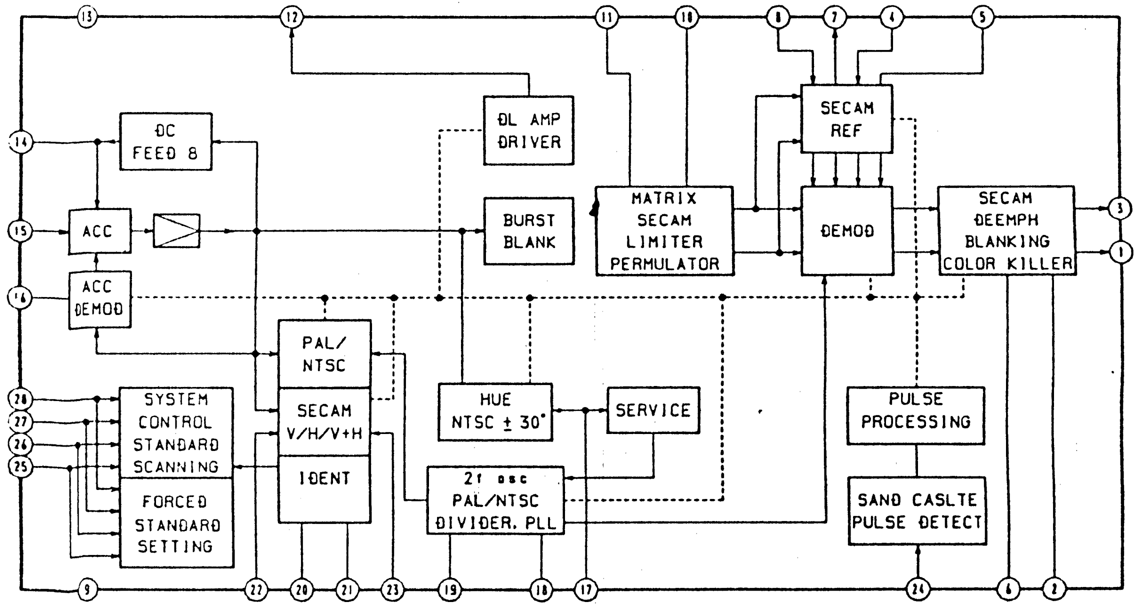
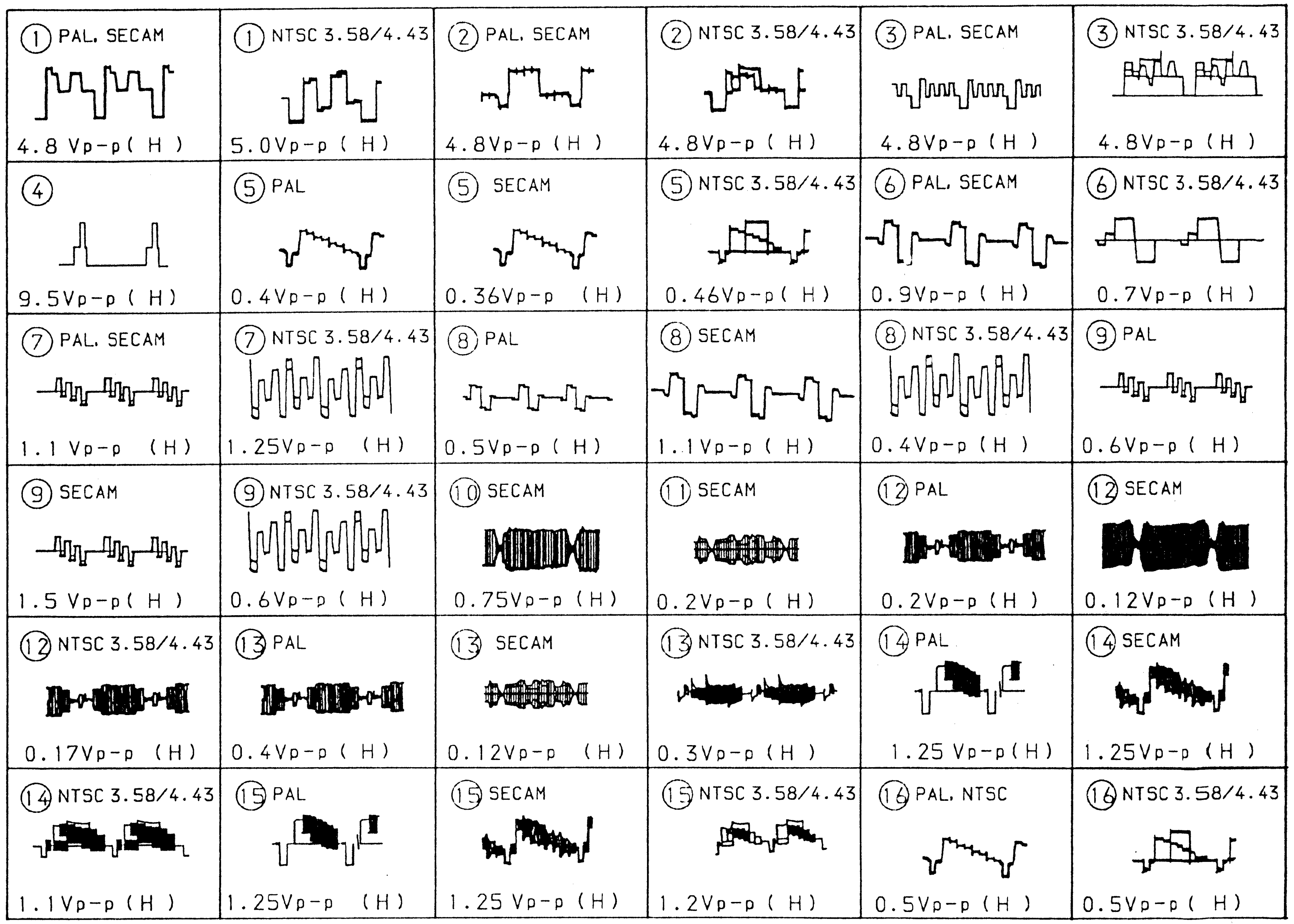
4
5
6
7
8

B BOARD IC331 TDA4650


13
12
11
10
8
7
4
5
14
DC FEED B
15
ACC
16
ACC DEMOD
BL AMP DRIVER
BURST BLANK
MATRIX SECAM LIMITER PERMULATOR
SECAM REF
DEMOD
SECAM DEEMPH BLANKING COLOR KILLER
3
1
PAL/NTSC
SECAM V/H/V+H
IDENT
HUE NTSC ± 30°
SERVICE
PULSE PROCESSING
SAND CASLTE PULSE DETECT
28
27
26
25
SYSTEM CONTROL STANDARD SCANNING
FORCED STANDARD SETTING
2f osc PAL/NTSC DIVIDER. PLL
9
22
20
21
23
19
18
17
24
6
2

· WAVEFORMS B BOARD



As to the voltage value shown by the mark ※ on the Schematic Diagram, see the another list.

		PAL	SECAM	NTSC3.58	NTSC4.43
IC301	⑧	0.1	0.1	5.8	0.1
	㉖	6.7	6.8	5.1	6.5
IC331	⑲	3.1	3.6	3.1	2.8
	㉑	3.0	3.5	2.9	2.7
	㉒	5.6	5.6	7.1	7.2
	㉓	7.5	7.0	5.6	5.6
	㉕	0.1	0.1	0.1	5.8
	㉖	0.1	0.1	5.8	0.1
	㉗	0.1	5.8	0.1	0.1
	㉘	5.9	0.1	0.1	0.1
Q331	(B)	0.1	0.1	5.8	0.1
	(C)	0.3	0.4	0	0.8
Q333	(B)	4.4	4.4	4.4	4.4
Q334	(B)	4.9	0.1	4.8	4.8
Q335	(B)	0.1	4.8	0.1	0.1

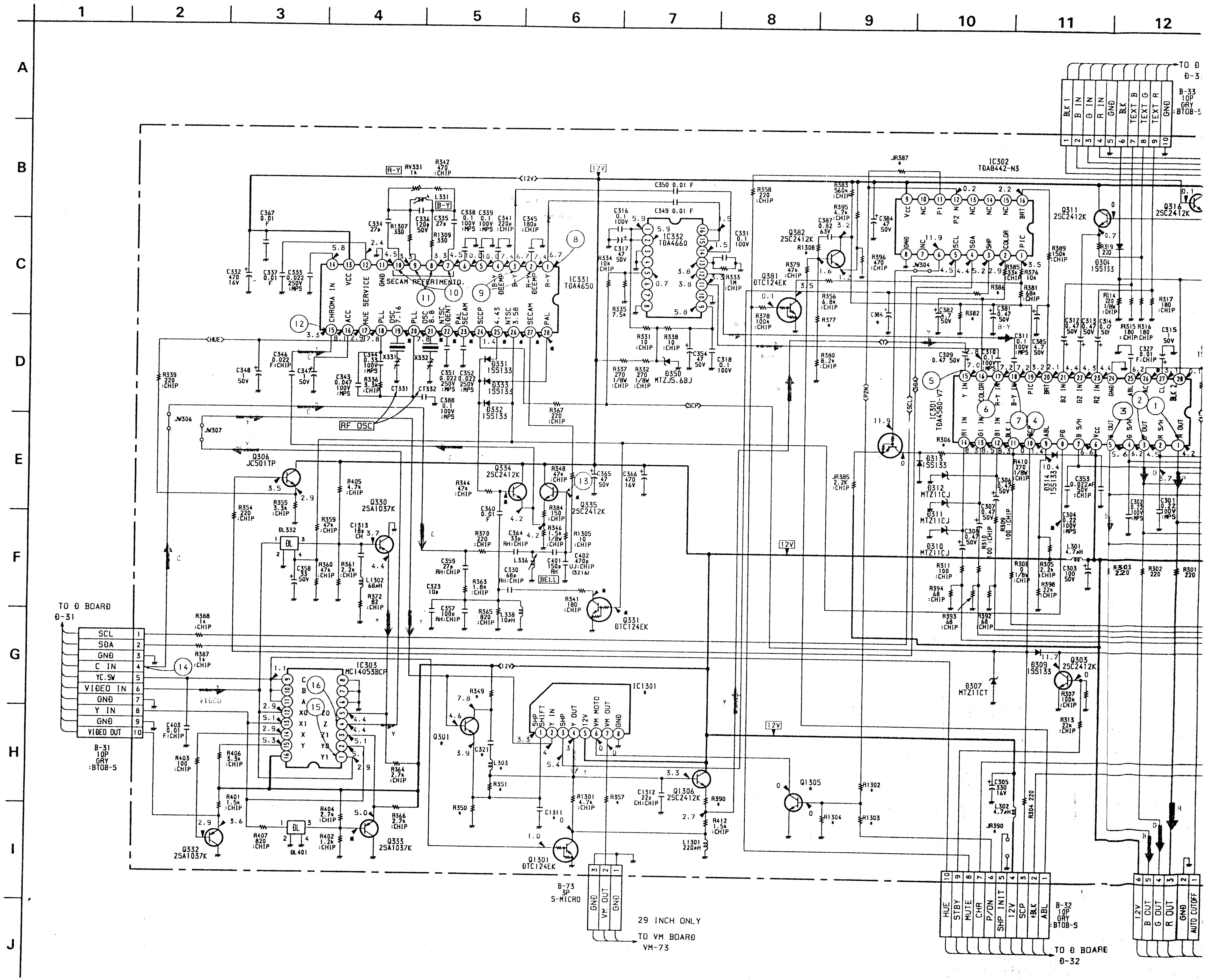
• B BOARD

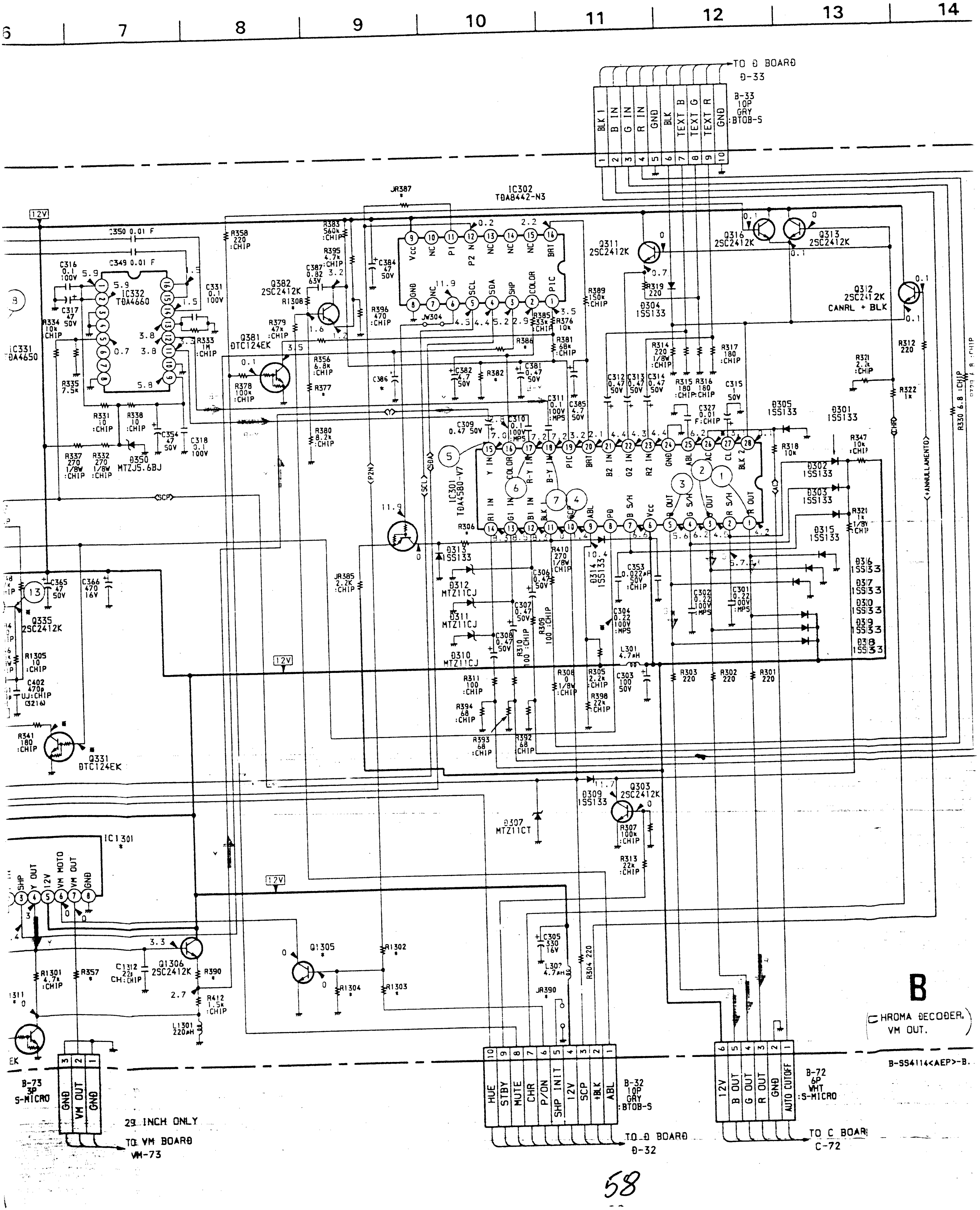
IC301	TDA4580-V7	VIDEO PROCESSOR
IC302	TDA8442-N3	D/A CONVERTER I 2 C BUS
IC303	MC14053BCP	Y/C COMP SW
IC331	TDA4650	COLOR PROCESSOR
IC332	TDA4660-V2	1H-DEALY
IC1301	HIC2110	SHARPNESS CONTROL (29 INCH ONLY)
Q301	2SC2412K	Y AMP (21/25 INCH ONLY)
Q303	2SC2412K	STBY SW
Q305	DTA144EK	ANTI PRIORITY SCART
Q306	JC501	VIDEO BUF (HUE)
Q311	2SC2412K	ON SCREEN DISPLAY SW
Q312	2SC2412K	CANRL + BLK
Q313	2SC2412K	ON SCREEN DISPLAY
Q316	2SC2412K	FAS PICTURE MUTE SW
Q330	2SA1037K	VIDEO AMP
Q331	DTC124EK	NTSC SW
Q332	2SA1037K	VIDEO BUFF
Q333	2SA1037K	Y AMP
Q334	2SC2412K	PAL/NTSC SW
Q335	2SC2412K	SECAM SW
Q381	DTC124EK	MUTE
Q382	2SC2412K	ABL
Q1301	DTC124EK	Y BUFF
Q1305	2SC2412K	Y OUT (29 INCH ONLY)
Q1306	2SC2412K	Y OUT
D301	1SS133	ACO AT STBY
D302	1SS133	ACO AT STBY
D303	1SS133	ACO AT STBY
D304	1SS133	DECOUPLING BLK
D305	1SS133	PROT
D307	MTZ11C	PROT
D309	1SS133	PROT
D310	MTZ11C	PROT
D311	MTZ11C	PROT
D312	MTZ11C	PROT
D313	1SS133	PROT
D314	1SS133	PROT
D315	1SS133	PROT
D316	1SS133	PROT
D317	1SS133	PROT
D318	1SS133	PROT
D319	1SS133	PROT
D320	1SS133	PROT
D331	1SS133	SECAM SW
D332	1SS133	SECAM SW
D333	1SS133	SECAM SW
D350	MTZJ5.6C	PROT

B BOARD * MARK

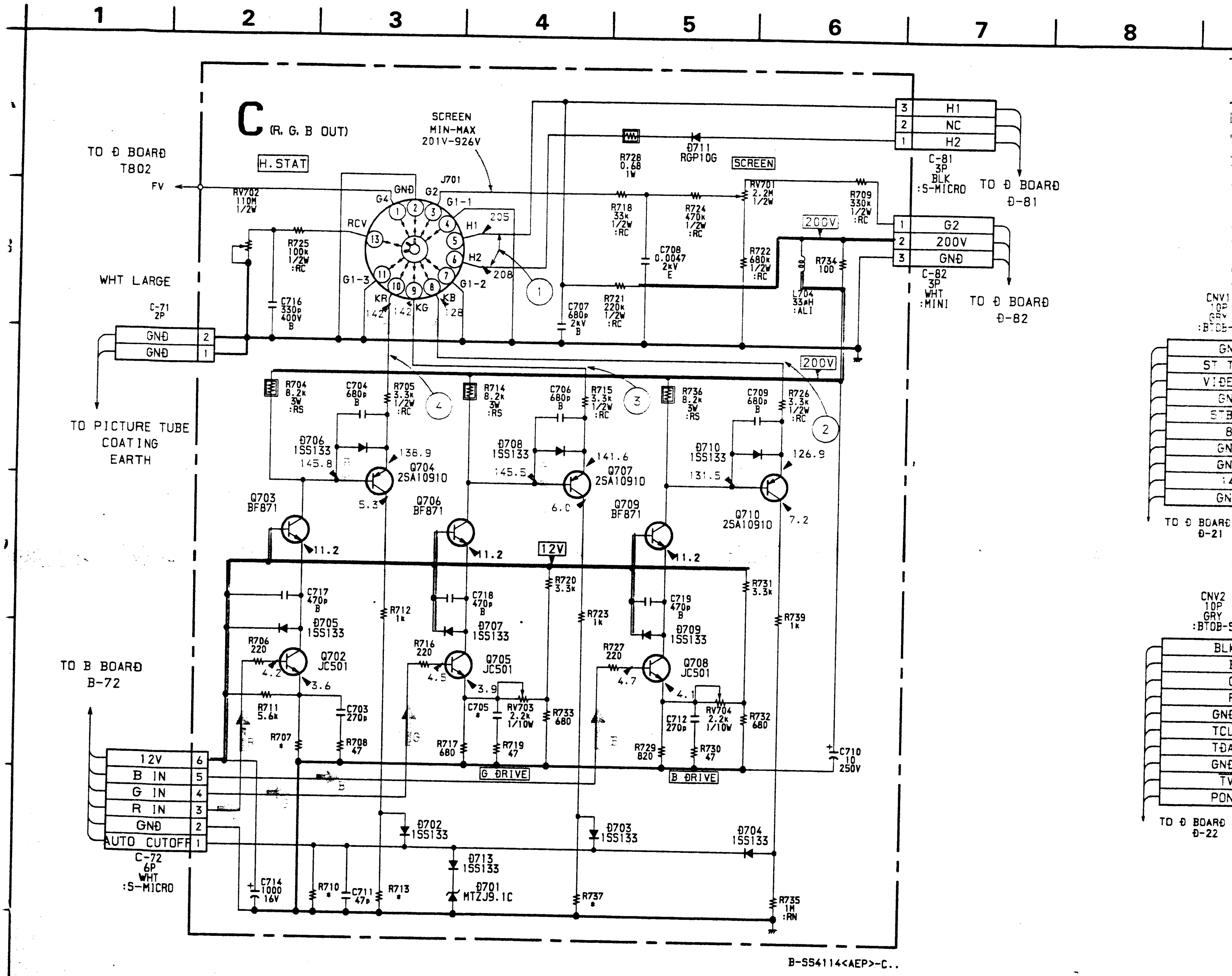
	21″	25″	29″
B-73	–	–	3P
C321	100P	100P	–
C386	–	–	4.7 50V
C1311	56P	56P	33P
IC1301	–	–	HIC2110
JR387	–	–	0 : CHIP
JR390	0 : CHIP	0 : CHIP	–
L303	5.6 μH	5.6 μH	–
Q301	2SC2412K	2SC2412K	–
Q1305	–	–	2SC2412K
R306	–	–	0 : CHIP
R349	680	680	–
R350	680	680	–
R351	220	680	–
R357	–	–	220
R377	330	330	1.8K
R382	270K	220K	220K
R386	–	–	3.3K
R390	220	220	100
R1302	–	–	47K
R1303	–	–	47K
R1304	–	–	100K
R1308	0	0	4.7K

– : NOT MOUNTED

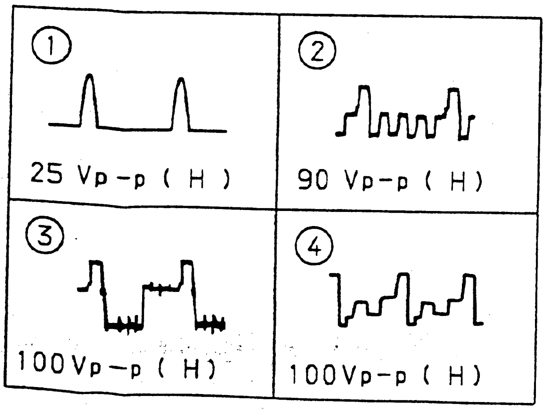

1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
IC331 TDA4650
IC332 TDA4660
IC302 TDA8442-N3
IC301 TDA4580-V7
IC303 MC14053BCP
IC1301
TO B BOARD B-31
SCL
SDA
GND
C IN
YC.SW
VIDEO IN
GND
Y IN
GND
VIDEO OUT
B-31 10P GRY :BT0B-S
B-73 3P S-MICRO
GND
VM OUT
GND
29 INCH ONLY
TO VM BOARD VM-73
HUE
STBY
MUTE
CHR
P/ON
SHP INIT
12V
SCP
+BLK
ABL
B-32 10P GRY :BT0B-S
TO B BOARD B-32
12V
B OUT
G OUT
R OUT
GND
AUTO CUTOFF
BLK 1
B IN
G IN
R IN
GND
BLK
TEXT B
TEXT G
TEXT R
GND
B-33 10P GRY :BT0B-S
TO B-3
Q301
Q303
Q306 JC501TP
Q309 1SS133
Q311 2SC2412K
Q316 2SC2412K
Q330 2SA1037K
Q331 DTC124EK
Q332 2SA1037K
Q333 2SA1037K
Q334 2SC2412K
Q335 2SC2412K
Q381 DTC124EK
Q382 2SC2412K
Q1301 DTC124EK
Q1305
Q1306 2SC2412K
RF OSC
BELL
(12V)


6
7
8
9
10
11
12
13
14
TO D BOARD D-33
B-33 10P GRY :BTOB-S
BLK 1
B IN
G IN
R IN
GND
BLK
TEXT B
TEXT G
TEXT R
GND
IC302 TDA8442-N3
IC301 TDA4580-V7
IC332 TDA4660
IC331 TDA4650
Q311 2SC2412K
Q316 2SC2412K
Q313 2SC2412K
Q312 2SC2412K CANRL + BLK
Q382 2SC2412K
Q381 DTC124EK
Q335 2SC2412K
Q331 DTC124EK
Q303 2SC2412K
Q1305
Q1306 2SC2412K
D350 MTZJ5.6BJ
D307 MTZ11CT
D309 1SS133
D304 1SS133
D305 1SS133
D301 1SS133
D302 1SS133
D303 1SS133
D315 1SS133
D313 1SS133
D314 1SS133
D312 MTZ11CJ
D311 MTZ11CJ
D310 MTZ11CJ
IC1301
12V
SCP
P2N
SCL
SDA
CHR
ANNULLAMENTO
VCC
NC
P1
P2 N
BRT
GND
SCL
SDA
SHP
COLOR
PIC
Y IN
COLOR
R-Y IN
B-Y IN
PIC
BRT
B2 IN
G2 IN
R2 IN
GND
ABL
XC
CL
BLK 2
R1 IN
G1 IN
B1 IN
BLK
SCP
ABL
PD
B S/H
Vcc
B OUT
G S/H
G OUT
R S/H
R OUT
L301 4.7μH
L302 4.7μH
L1301 220μH
B-73 3P S-MICRO
GND
VM OUT
GND
29 INCH ONLY
TO VM BOARD VM-73
B-32 10P GRY :BTOB-S
HUE
STBY
MUTE
CHR
P/ON
SHP INIT
12V
SCP
+BLK
ABL
TO D BOARD D-32
B-72 6P WHT :S-MICRO
12V
B OUT
G OUT
R OUT
GND
AUTO CUTOFF
TO C BOARD C-72
B
CHROMA DECODER, VM OUT.
B-SS4114<AEP>-B.

58


1
2
3
4
5
6
7
8
C (R, G, B OUT)
H.STAT
SCREEN MIN-MAX 201V-926V
TO Ð BOARD T802
FV
RV702 110M 1/2W
GND
G4
G2
J701
G1-1
RCV
H1
205
H2
208
G1-3
G1-2
KR
KG
KB
142
142
128
R725 100k 1/2W :RC
C716 330p 400V B
WHT LARGE
C-71 2P
GND
GND
TO PICTURE TUBE COATING EARTH
R728 0.68 1W
D711 RGP10G
SCREEN
R718 33k 1/2W :RC
R724 470k 1/2W :RC
RV701 2.2M 1/2W
R709 330k 1/2W :RC
C708 0.0047 2kV E
R722 680k 1/2W :RC
R734 100
200V
L704 33μH :ALI
C707 680p 2kV B
R721 220k 1/2W :RC
H1
NC
H2
C-81 3P BLK :S-MICRO
TO Ð BOARD Ð-81
G2
200V
GND
C-82 3P WHT :MINI
TO Ð BOARD Ð-82
R704 8.2k 3W :RS
C704 680p B
R705 3.3k 1/2W :RC
R714 8.2k 3W :RS
C706 680p B
R715 3.3k 1/2W :RC
R736 8.2k 3W :RS
C709 680p B
R726 3.3k 1/2W :RC
D706 1SS133
D708 1SS133
D710 1SS133
136.9
145.8
141.6
145.5
126.9
131.5
Q704 2SA10910
Q707 2SA10910
Q710 2SA10910
5.3
6.0
7.2
Q703 BF871
Q706 BF871
Q709 BF871
11.2
11.2
11.2
12V
R720 3.3k
R731 3.3k
C717 470p B
C718 470p B
C719 470p B
D705 1SS133
D707 1SS133
D709 1SS133
R712 1k
R723 1k
R739 1k
R706 220
R716 220
R727 220
Q702 JC501
Q705 JC501
Q708 JC501
4.2
3.6
4.5
3.9
4.7
4.1
R711 5.6k
C703 270p
C705
RV703 2.2k 1/10W
R733 680
C712 270p
RV704 2.2k 1/10W
R732 680
R707
R708 47
R717 680
R719 47
R729 820
R730 47
C710 10 250V
G DRIVE
B DRIVE
R
G
B
TO B BOARD B-72
12V
B IN
G IN
R IN
GND
AUTO CUTOFF
C-72 6P WHT :S-MICRO
D702 1SS133
D703 1SS133
D704 1SS133
D713 1SS133
D701 MTZJ9.1C
C714 1000 16V
R710
C711 47p
R713
R737
R735 1M :RN
CNV1 10P GRY :BTOB
GND
ST
VIDEO
GND
STB
GND
GND
GND
TO Ð BOARD Ð-21
CNV2 10P GRY :BTOB-S
BLK
GND
TCL
TDA
GND
TV
PON
TO Ð BOARD Ð-22
B-SS4114<AEP>-C..

• WAVEFORMS C BOARD

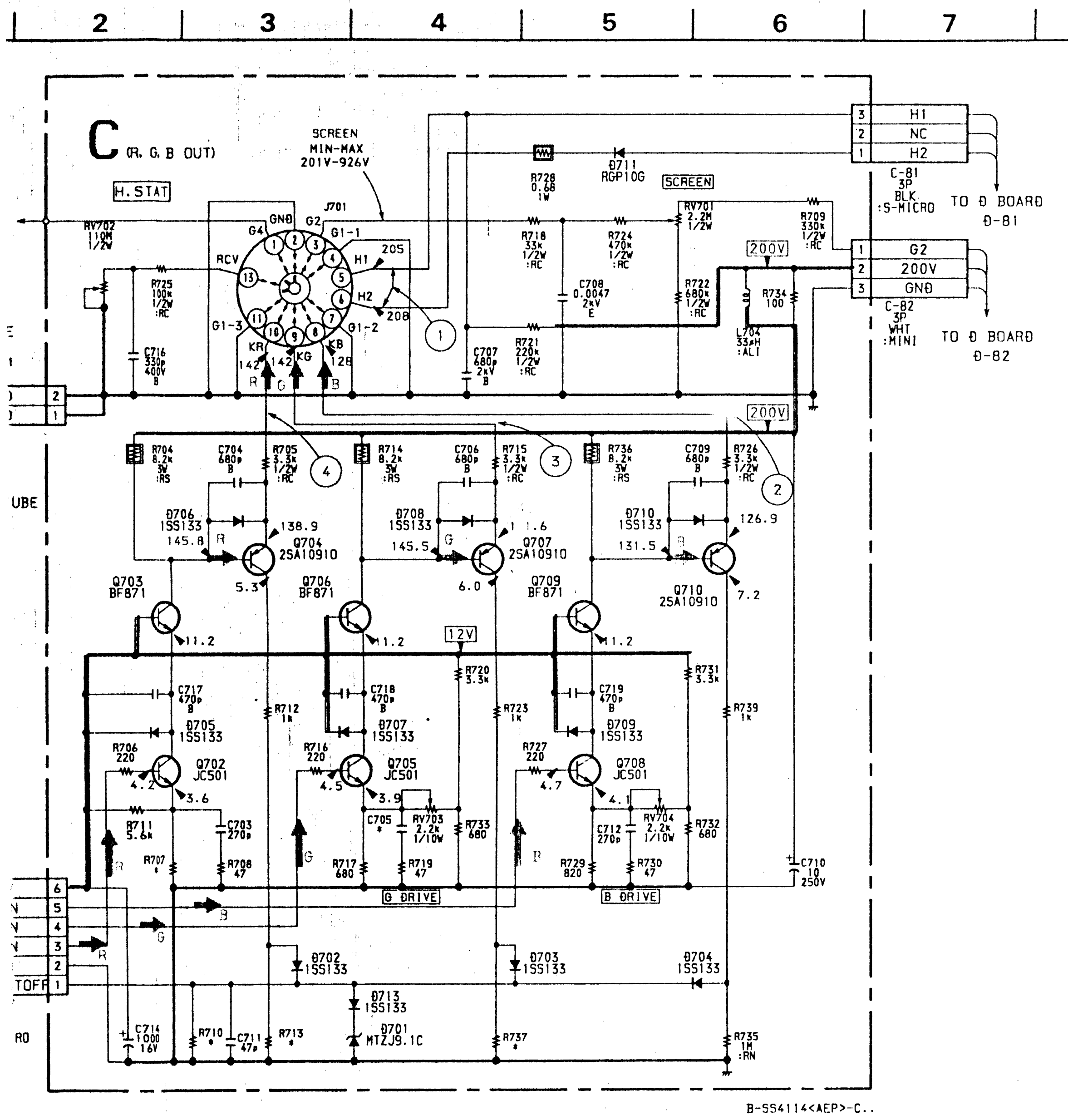

①
25 Vp-p (H)
②
90 Vp-p (H)
③
100Vp-p (H)
④
100Vp-p (H)

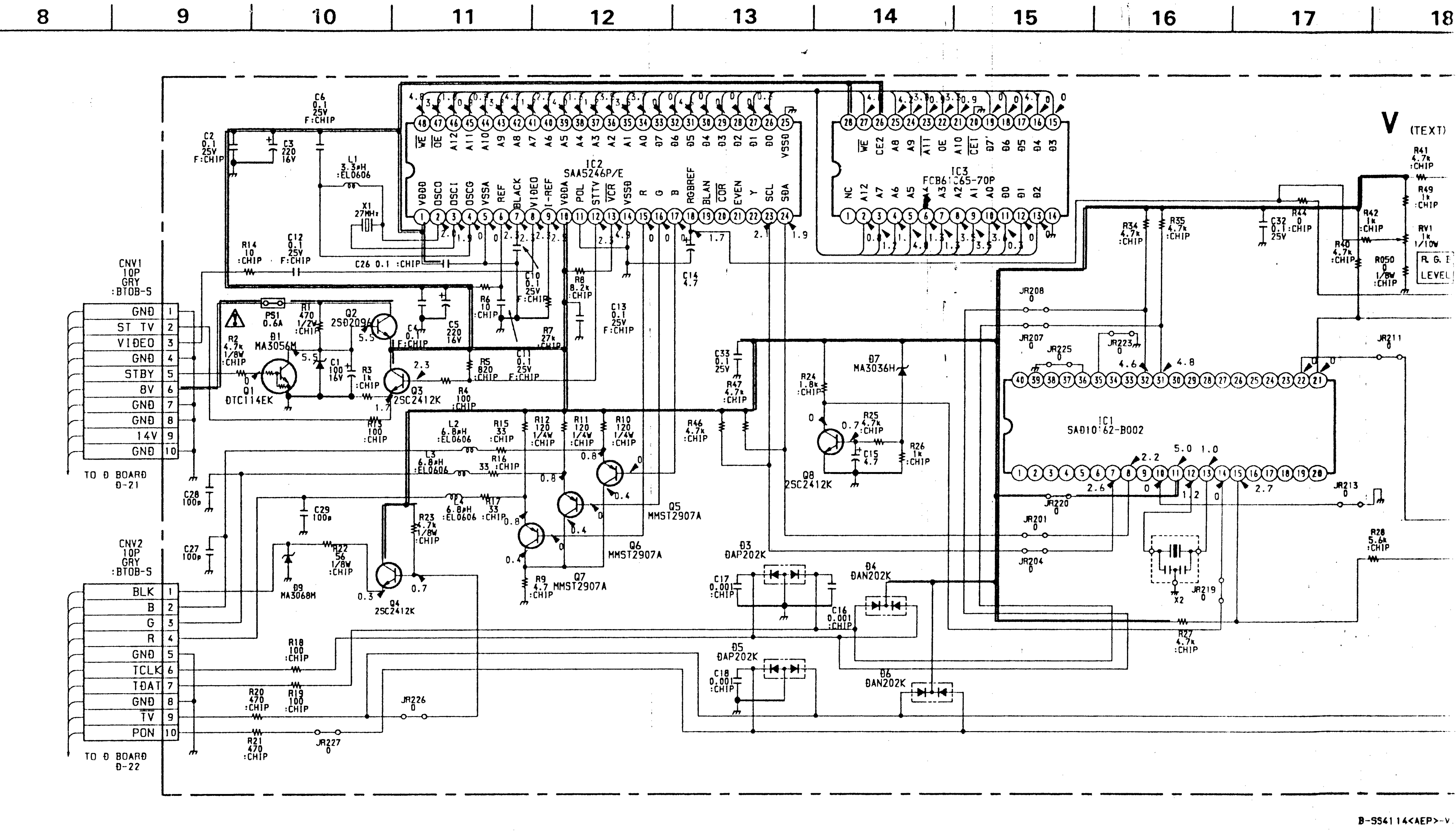
• C BOARD

Q702	JC501	R DRIVE
Q703	BF871	R OUT
Q704	2SA10910	ACO MEASURING
Q705	JC501	G DRIVE
Q706	BF871	G OUT
Q707	2SA10910	ACO MEASURING
Q708	JC501	B DRIVE
Q709	BF871	B OUT
Q710	2SA10910	ACO MEASURING
D701	MTZJ9.1C	PROTECT
D702	1SS133	PROTECT
D703	1SS133	PROTECT
D704	1SS133	PROTECT
D705	1SS133	PROTECT
D706	1SS133	PROTECT
D707	1SS133	PROTECT
D708	1SS133	PROTECT
D709	1SS133	PROTECT
D710	1SS133	PROTECT
D711	RGP10G	HEATING VOLTAGE REC
D713	1SS133	PROTECT

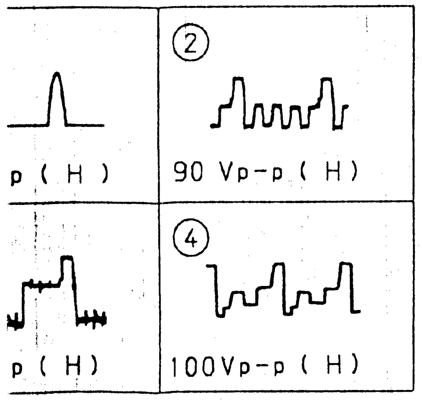
C BOARD

C705
R707
R710
R713
R737


2
3
4
5
6
7
C (R, G, B OUT)
H.STAT
SCREEN
MIN-MAX
201V-926V
J701
RV702 110M 1/2W
R725
C716
GND
G2
G1-1
G4
RCV
H1
H2
G1-3
G1-2
KR
KG
KB
R
G
B
H1
NC
H2
C-81 3P BLK :S-MICRO
TO D BOARD D-81
G2
200V
GND
C-82 3P WHT :MINI
TO D BOARD D-82
D711 RGP10G
SCREEN
RV701 2.2M 1/2W
R709 330k 1/2W :RC
200V
R734 100
L704 33μH :AL1
R728 0.68 1W
R718 33k 1/2W :RC
R724 470k 1/2W :RC
C708 0.0047 2kV E
R722 680k 1/2W :RC
R721 220k 1/2W :RC
C707 680p 2kV B
200V
R704 8.2k 5W :RS
C704 680p B
R705 3.3k 1/2W :RC
R714 8.2k 5W :RS
C706 680p B
R715 3.3k 1/2W :RC
R736 8.2k 5W :RS
C709 680p B
R726 3.3k 1/2W :RC
D706 1SS133
D708 1SS133
D710 1SS133
Q704 2SA1091O
Q707 2SA1091O
Q710 2SA1091O
Q703 BF871
Q706 BF871
Q709 BF871
12V
R720 3.3k
R731 3.3k
R739 1k
C717 470p B
D705 1SS133
R712 1k
C718 470p B
D707 1SS133
R723 1k
C719 470p B
D709 1SS133
R706 220
Q702 JC501
R716 220
Q705 JC501
R727 220
Q708 JC501
R711 5.6k
C703 270p
R707 *
R708 47
C705 *
RV703 2.2k 1/10W
R733 680
R717 680
R719 47
C712 270p
RV704 2.2k 1/10W
R732 680
R729 820
R730 47
C710 10 250V
G DRIVE
B DRIVE
D702 1SS133
D703 1SS133
D704 1SS133
D713 1SS133
D701 MTZJ9.1C
C714 100 16V
R710 *
C711 47p
R713 *
R737 *
R735 1M :RN
UBE
TOFF
RO
B-SS4114<AEP>-C..


8
9
10
11
12
13
14
15
16
17
18
V (TEXT)
IC2 SAA5246P/E
IC3 FCB61C65-70P
IC1 SDA20162-B002
C6 0.1 25V F:CHIP
C2 0.1 25V F:CHIP
C3 220 16V
L1 3.3μH :EL0606
X1 27MHz
R14 10 :CHIP
C12 0.1 25V F:CHIP
C26 0.1 :CHIP
CNV1 10P GRY :BTOB-S
GND
ST TV
VIDEO
GND
STBY
8V
GND
GND
14V
GND
TO D BOARD D-21
PS1 0.6A
R1 470 1/2W :CHIP
Q2 2SD2096
D1 MA3056M
R2 4.7k 1/8W :CHIP
Q1 DTC114EK
C1 100 16V
R3 1k :CHIP
Q3 2SC2412K
R4 100 :CHIP
C5 220 16V
R5 820 :CHIP
C11 0.1 25V F:CHIP
R6 10 :CHIP
C10 0.1 25V :CHIP
R8 8.2k :CHIP
R7 27k :CHIP
C13 0.1 25V F:CHIP
C14 4.7
C33 0.1 25V
R47 4.7k :CHIP
R24 1.8k :CHIP
D7 MA3036H
R25 4.7k :CHIP
C15 4.7
R26 1k :CHIP
Q8 2SC2412K
R13 100 :CHIP
L2 6.8μH :EL0606
L3 6.8μH :EL0606
R15 33 :CHIP
R16 33 :CHIP
R12 120 1/4W :CHIP
R11 120 1/4W :CHIP
R10 120 1/4W :CHIP
R46 4.7k :CHIP
L4 6.8μH :EL0606
R17 33 :CHIP
Q5 MMST2907A
Q6 MMST2907A
Q7 MMST2907A
R23 4.7k 1/8W :CHIP
Q4 2SC2412K
R9 4.7 :CHIP
C28 100p
C29 100p
C27 100p
R22 56 1/8W :CHIP
D9 MA3068M
CNV2 10P GRY :BTOB-S
BLK
B
G
R
GND
TCLK
TDAT
GND
TV
PON
TO D BOARD D-22
R18 100 :CHIP
R20 470 :CHIP
R19 100 :CHIP
R21 470 :CHIP
JR226 0
JR227 0
D3 DAP202K
D4 DAN202K
D5 DAP202K
D6 DAN202K
C17 0.001 :CHIP
C16 0.001 :CHIP
C18 0.001 :CHIP
R34 4.7k :CHIP
R35 4.7k :CHIP
C32 0.1 25V
R44 0 :CHIP
R42 1k :CHIP
R40 4.7k :CHIP
R41 4.7k :CHIP
R49 1k :CHIP
RV1 1k 1/10W
R050 1/8W :CHIP
R, G, B LEVEL
JR208 0
JR207 0
JR225 0
JR223 0
JR211
JR213 0
JR220 0
JR201 0
JR204 0
JR219 0
X2
R27 4.7k :CHIP
R28 5.6k :CHIP
B-SS4114<AEP>-V

RMS C BOARD



• C BOARD

Q702	JC501	R DRIVE
Q703	BF871	R OUT
Q704	2SA1091O	ACO MEASURING
Q705	JC501	G DRIVE
Q706	BF871	G OUT
Q707	2SA1091O	ACO MEASURING
Q708	JC501	B DRIVE
Q709	BF871	B OUT
Q710	2SA1091O	ACO MEASURING
D701	MTZJ9.1C	PROTECT
D702	1SS133	PROTECT
D703	1SS133	PROTECT
D704	1SS133	PROTECT
D705	1SS133	PROTECT
D706	1SS133	PROTECT
D707	1SS133	PROTECT
D708	1SS133	PROTECT
D709	1SS133	PROTECT
D710	1SS133	PROTECT
D711	RGP10G	HEATING VOLTAGE REC
D713	1SS133	PROTECT

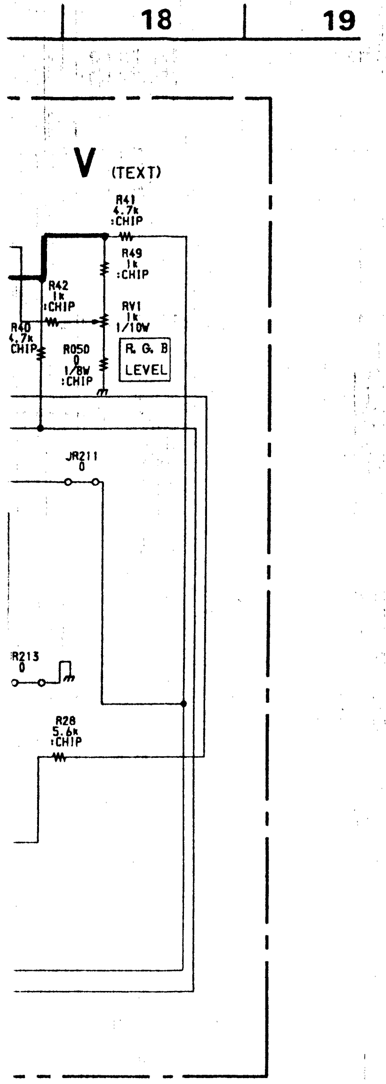
C BOARD * MARK

	21"	25"	29"
C705	180P	220P	220P
R707	430	390	390
R710	100K	68K	68K
R713	160K	120K	120K
R737	390K	820K	470K

－ : NOT MOUNTED

• V BOARD

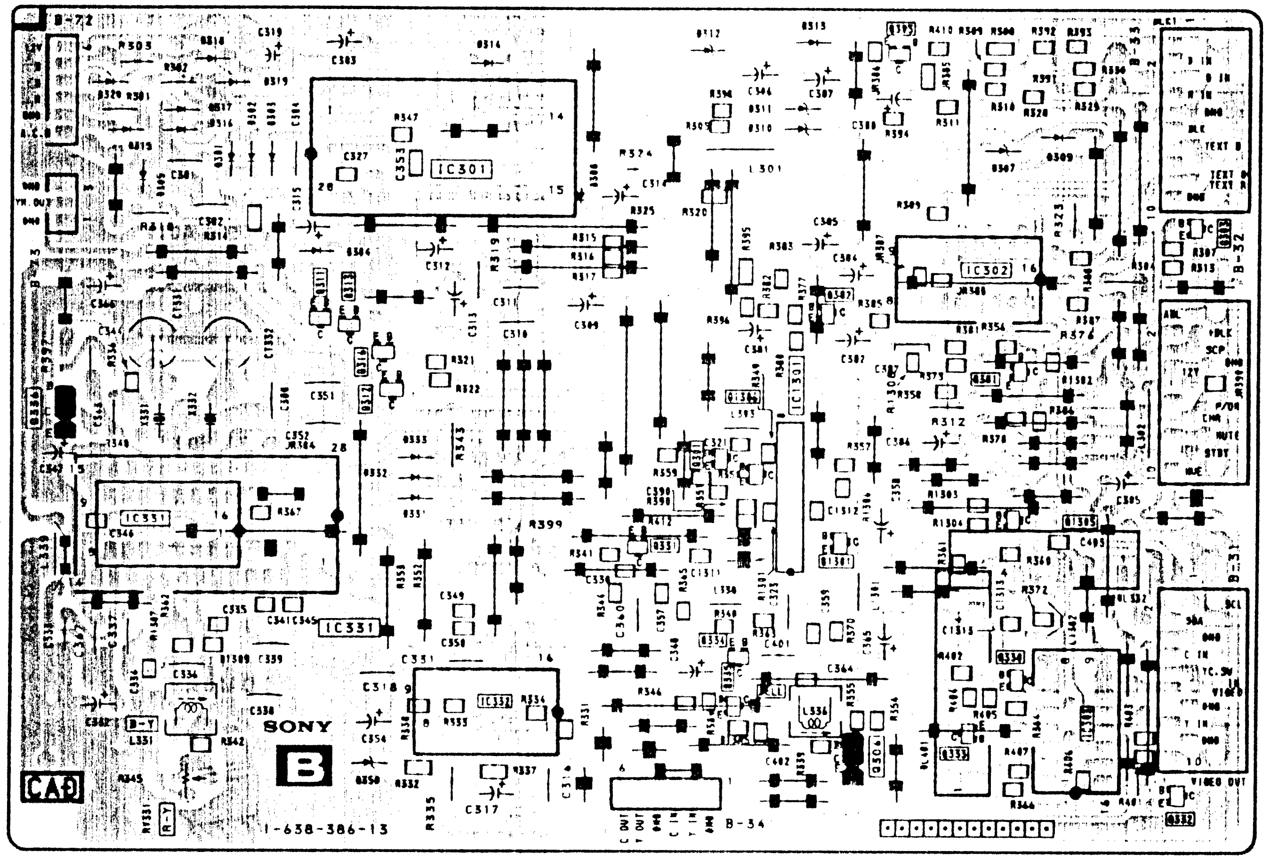
IC1	SDA20162-B002	MICRO-CONT
IC2	SAA5246P/E	IVT
IC3	FCB61C65-70P	STATIC-RAM
Q1	DTC114EK	STAD BY
Q2	2SD2096	5V REG
Q3	2SC2412K	SYNC BUFFER
Q4	2SC2412K	BLK OUT
Q5	MMST2907A	B OUT
Q6	MMST2907A	G OUT
Q7	MMST2907A	R OUT
Q8	2SC2412K	RESET
D1	MA3056M	5V REG
D3	DAP202K	PROTEC
D4	DAN202K	PROTEC
D5	DAP202K	PROTEC
D6	DAN202K	PROTEC
D7	MA3036H	PROTEC
D9	MA3068M	PROTEC


18
19
V (TEXT)
R41 4.7k :CHIP
R49 1k :CHIP
R42 1k :CHIP
RV1 1k 1/10V
R40 4.7k CHIP
R050 0 1/8W :CHIP
R. G. B LEVEL
JR211 0
R213 0
R28 5.6k :CHIP

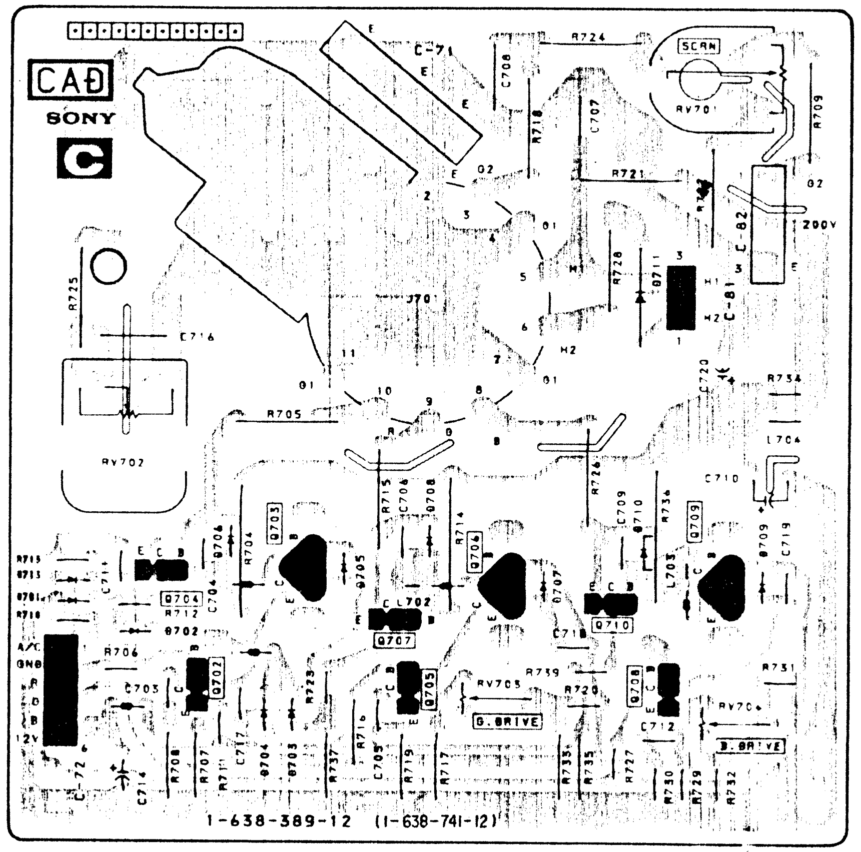
B-SS4114<AEP>-V..

B [CHROMA DECODER VM OUT] C [R. G. B OUT] V [TELE TEXT]

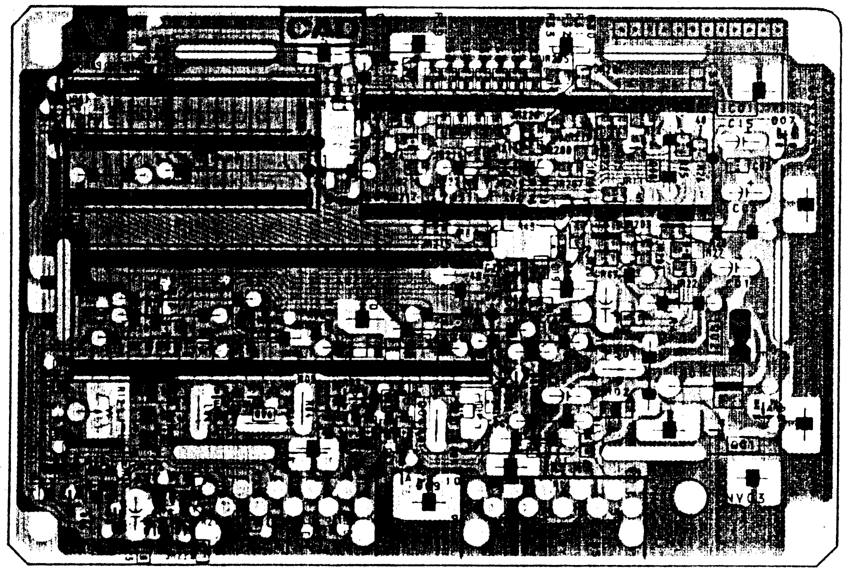
—B Board—


IC301
IC302
IC331
IC332
IC1301
SONY
B
CAD
1-638-386-13

—C Board—


CAD
SONY
C
RV702
RV703
G.DRIVE
B.DRIVE
1-638-389-12 (1-638-741-12)

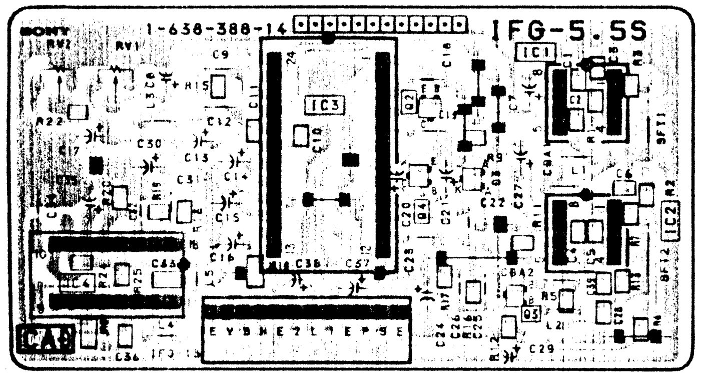
—V Board—



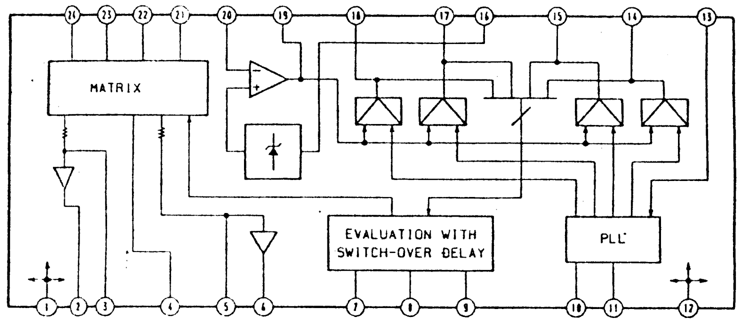
- ▨: Pattern from the side which enables seeing.
- ■: Pattern of the rear side.

IFG [SIF]

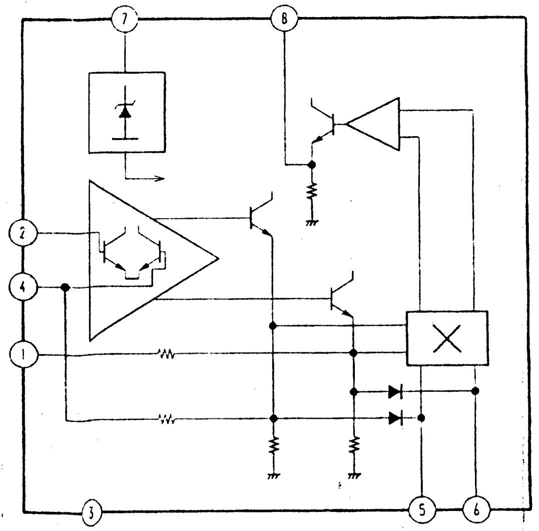
-IFG-5.5S Board-

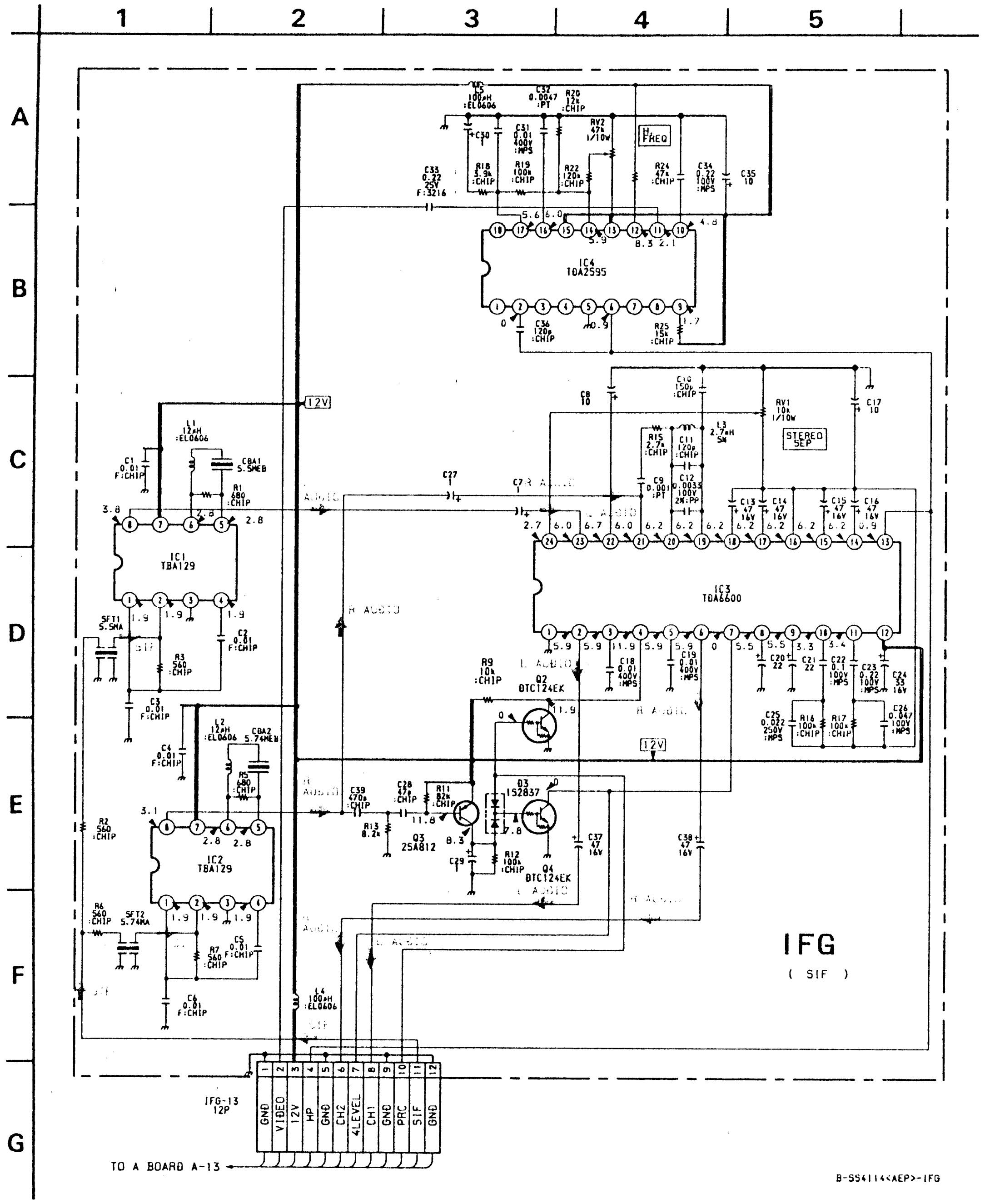

1-638-388-14
IFG-5.5S
SONY
IC1
IC2
IC3
IC4
CA1
CA2
C9
R15
R22
C50
C13
C14
C15
C16
C29
C30
C38
C57
C20
C22
C27
C28
Q2
Q3
Q4
L3
L4
L5
R5
R17
R19
R21
RV1
RV2
L1
L2

IFG-5.5S BOARD IC3 TDA6600

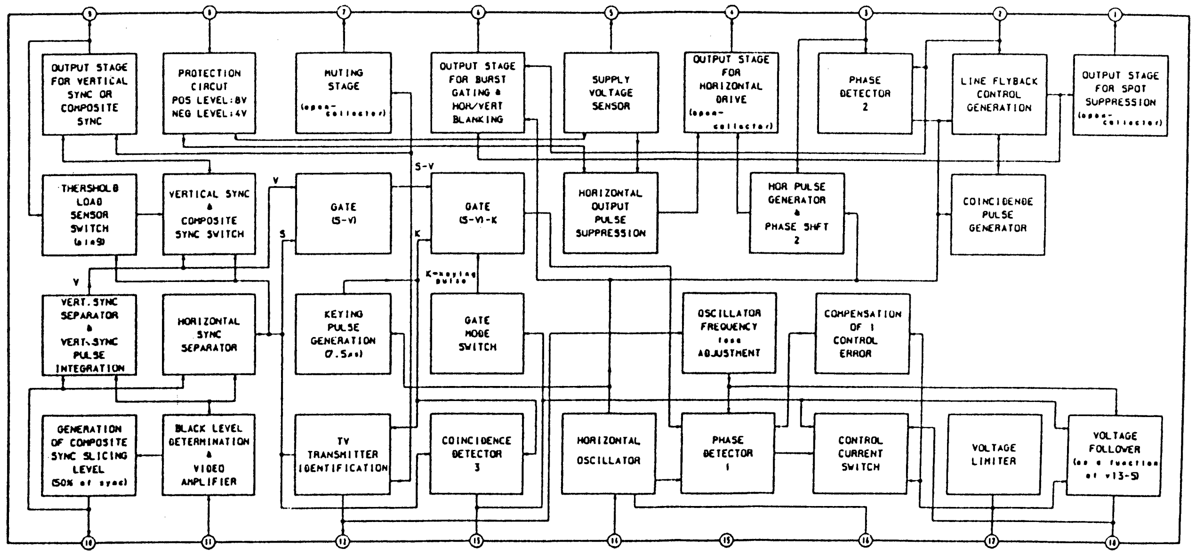

MATRIX
EVALUATION WITH SWITCH-OVER DELAY
PLL
24
23
22
21
20
19
18
17
16
15
14
13
1
2
3
4
5
6
7
8
9
10
11
12

IFG-5.5S BOARD IC1/2 TBA129



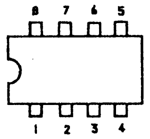

1
2
3
4
5
A
B
C
D
E
F
G
IC1 TBA129
IC2 TBA129
IC3 TDA6600
IC4 TDA2595
Q2 DTC124EK
Q3 2SA812
Q4 DTC124EK
Q3 1S2837
H FREQ
STEREO SEP
12V
IFG (SIF)
IFG-13 12P
GND
VIDEO
12V
HP
GND
CH2
4LEVEL
CH1
GND
PRC
SIF
GND
TO A BOARD A-13
B-554114<AEP>-IFG

IFG-5.5S BOARD IC4 TDA2595

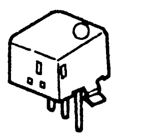

OUTPUT STAGE FOR VERTICAL SYNC OR COMPOSITE SYNC
PROTECTION CIRCUT POS LEVEL:8V NEG LEVEL:4V
MUTING STAGE (open-collector)
OUTPUT STAGE FOR BURST GATING & HOR/VERT BLANKING
SUPPLY VOLTAGE SENSOR
OUTPUT STAGE FOR HORIZONTAL DRIVE (open-collector)
PHASE DETECTOR 2
LINE FLYBACK CONTROL GENERATION
OUTPUT STAGE FOR SPOT SUPPRESSION (open-collector)
THERSHOLD LOAD SENSOR SWITCH (a to 9)
VERTICAL SYNC & COMPOSITE SYNC SWITCH
GATE (S-V)
GATE (S-V)-K
HORIZONTAL OUTPUT PULSE SUPPRESSION
HOR PULSE GENERATOR & PHASE SHFT 2
COINCIDENCE PULSE GENERATOR
VERT. SYNC SEPARATOR & VERT. SYNC PULSE INTEGRATION
HORIZONTAL SYNC SEPARATOR
KEYING PULSE GENERATION (7.5μs)
GATE MODE SWITCH
OSCILLATOR FREQUENCY fine ADJUSTMENT
COMPENSATION OF 1 CONTROL ERROR
GENERATION OF COMPOSITE SYNC SLICING LEVEL (50% of sync)
BLACK LEVEL DETERMINATION & VIDEO AMPLIFIER
TV TRANSMITTER IDENTIFICATION
COINCIDENCE DETECTOR 3
HORIZONTAL OSCILLATOR
PHASE DETECTOR 1
CONTROL CURRENT SWITCH
VOLTAGE LIMITER
VOLTAGE FOLLOWER (as a function of V13-5)
S-V
V
S
K
K-keying pulse

5-4. SEMICONDUCTORS

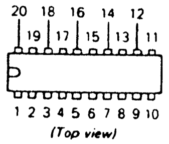
BA4558
NE5532P
RC4558P
SDA2546
TBA129
TDA1543
TEA2014A
TEA2031A



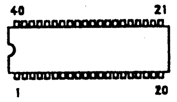
SBX1610-11



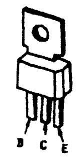
TDA8732


20 18 16 14 12
19 17 15 13 11
1 2 3 4 5 6 7 8 9 10
(Top view)

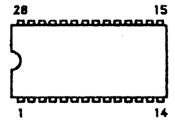
SDA20560-A012



BF871



CXA1114P
CXK5864BP-10L
FCB61C65-70P
MAB8461P-W208
SAA7280P/M3
TC5565APL-15L
TDA4580-V7
TDA4650-V4
TDA6200
TEA2028B



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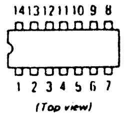
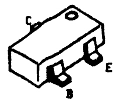
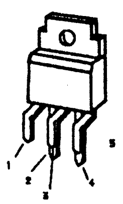

14 13 12 11 10 9 8
1 2 3 4 5 6 7
(Top view)

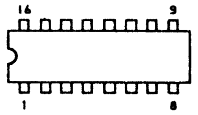
DTA144EK
DTC114EK
DTC124EK
DTC144EK
2SA1162-G
2SB1295-UL6
2SC1623-L5L6



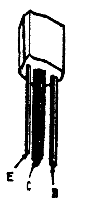
TDA2050



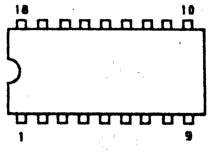
HD14053BFP
MC14051BCP
PCF8574
TDA4660V2
TDA8442-N3
TEA2260
μ PD4053BC



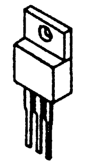
DTC144ES



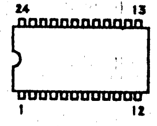
TDA2595-V9



LM7812CT
TEA7605



TDA6600-2



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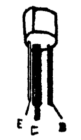
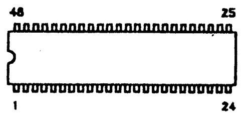
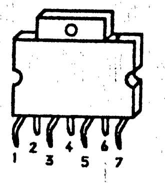
2SD789-34



SAA5246P/E/M4A
SAA5246P/E
SAA5246P/H



TDA8170



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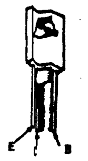

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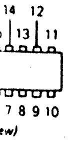


71

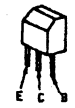
EK
EK
EK
EK
-G
-UL6
-L5L6

ES

31-0
3-34

0A-P
8-LK

2SB734-34
2SD773-34
2SD774-34



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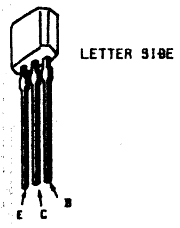

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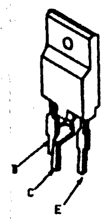
2SD1941-06



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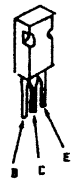

BB405B
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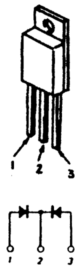
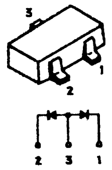
EGP20G
ERC06-15S
HZS11NB3TD
RU-3AM

CTU-12S



DAP202K



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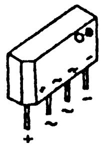
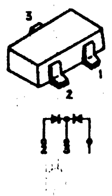


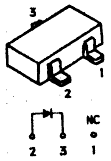
ERD29-08J

MA152WK



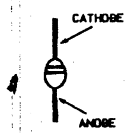
MTZJ-13B
MTZJ-15A
MTZJ-3.9B
MTZJ-33A
MTZJ-36D
MTZN-10C
RD11ES-B3
RD5.6ESB2
RD6.2ES-B2
RD6.8ESB2
RD7.5ESB2
RD9.1ESB3
UZ-4.7BSC
1SS119

RD3.6M-B2
RD5.6M-B2
RD6.8M-B2

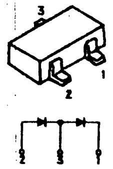


RGP02-17

U05G



1SS226



LD-201VR

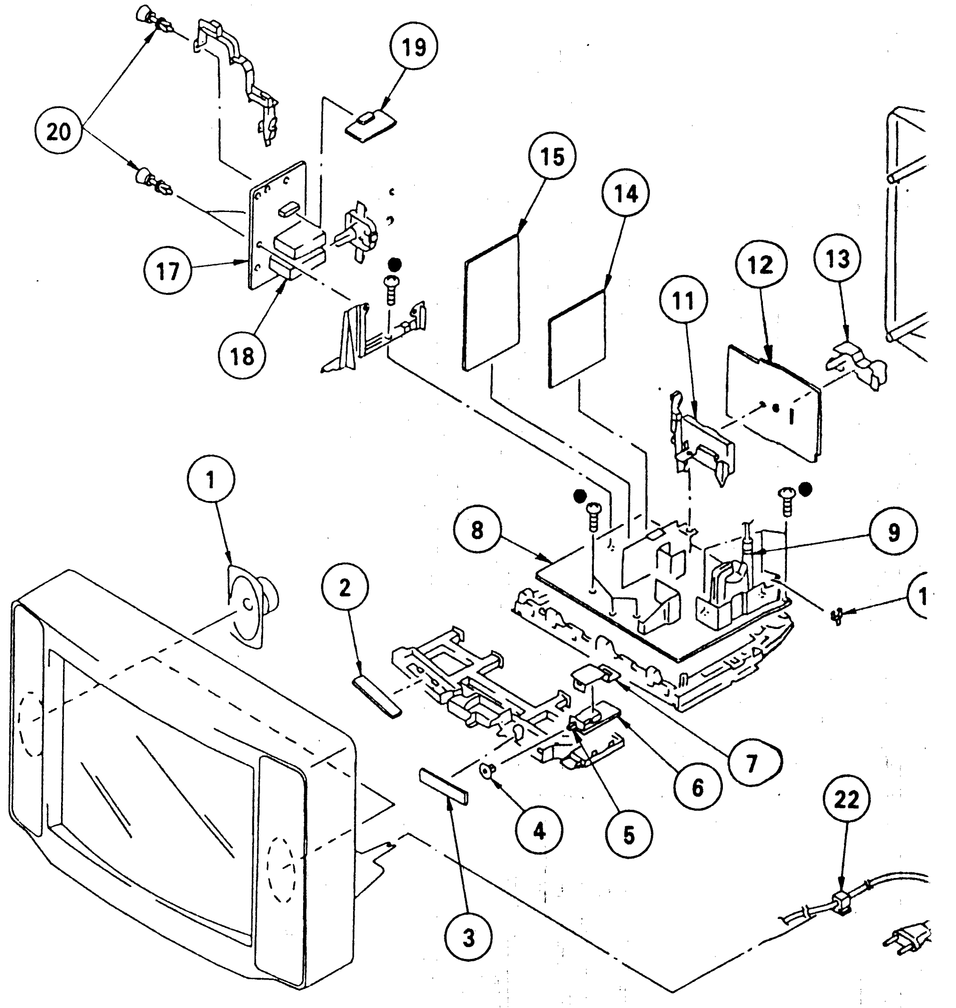
SECTION 6
EXPLODED VIEWS

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

6-1. CHASSIS (KV-C2161D)

● : BVTP 3 × 12 7-685-648-79
■ : BVTP 4 × 16 7-685-663-79



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.
1	1-544-525-11	SPEAKER		12	*A-1651-018-A
2	*1-638-391-11	H1 BOARD		13	4-200-014-01
3	*1-638-392-11	H2 BOARD		14	*A-1645-013-A
4	4-386-611-01	COVER, SWITCH		15	*A-1621-046-A
5	⚠1-571-433-12	SWITCH, PUSH (AC POWER)		16	4-033-072-01
6	*1-638-390-11	F BOARD		17	*A-1632-022-A
7	4-200-757-01	COVER, POWER SWITCH		18	⚠1-465-301-11
8	*A-1642-035-A	D BOARD, COMPLETE		19	*A-1654-004-A
9	⚠1-439-416-51	TRANSFORMER ASSY, FLYBACK (UX-1650)		20	4-386-618-01
10	*3-646-071-00	HOLDER, WIRE		21	⚠1-590-501-11
11	*4-3[illegible]-624-11	BRACKET, J		22	⚠4-389-201-03

SECTION 6
EXPLODED VIEWS

NOTE:

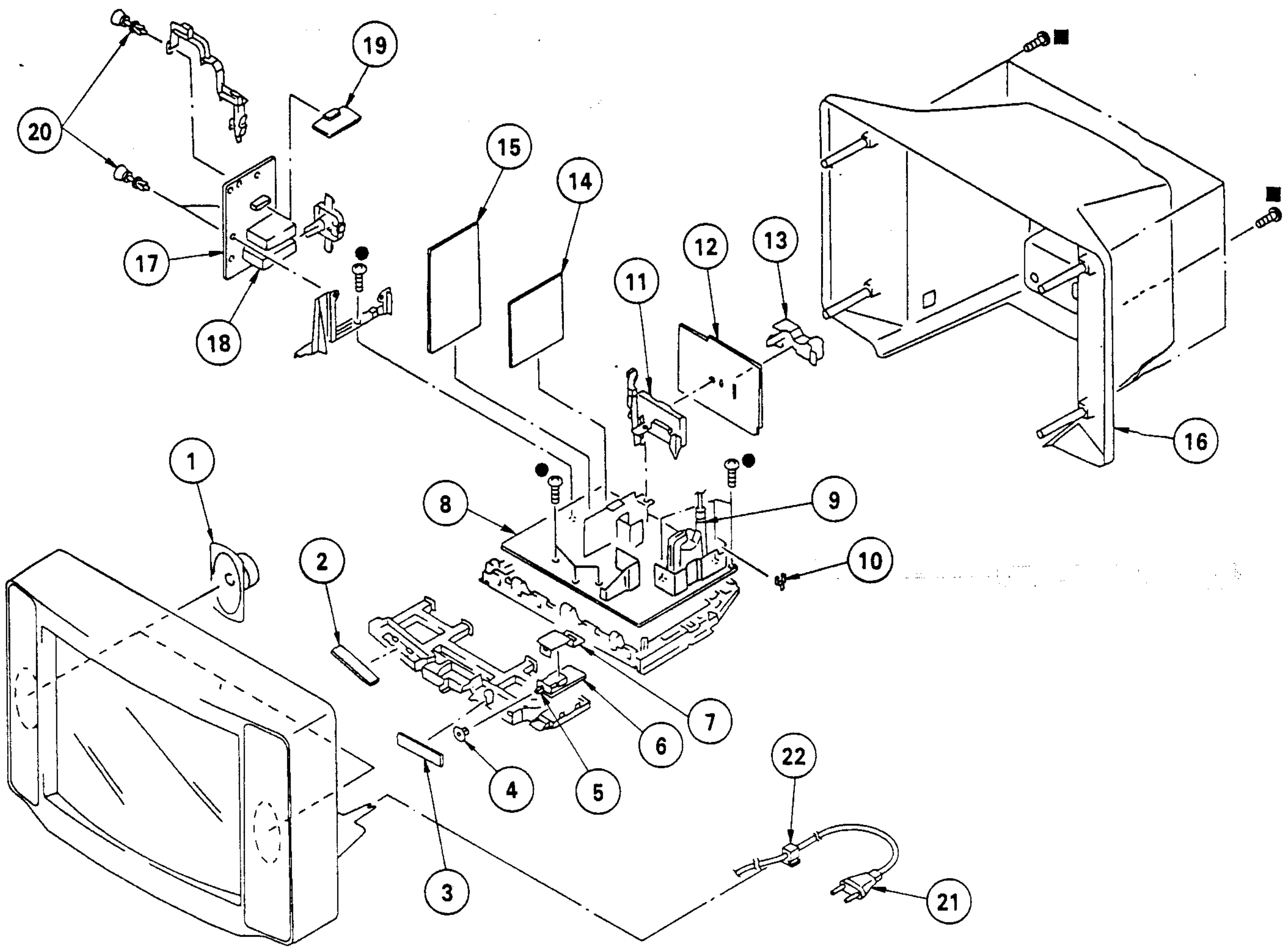
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

6-1. CHASSIS (KV-C2161D)

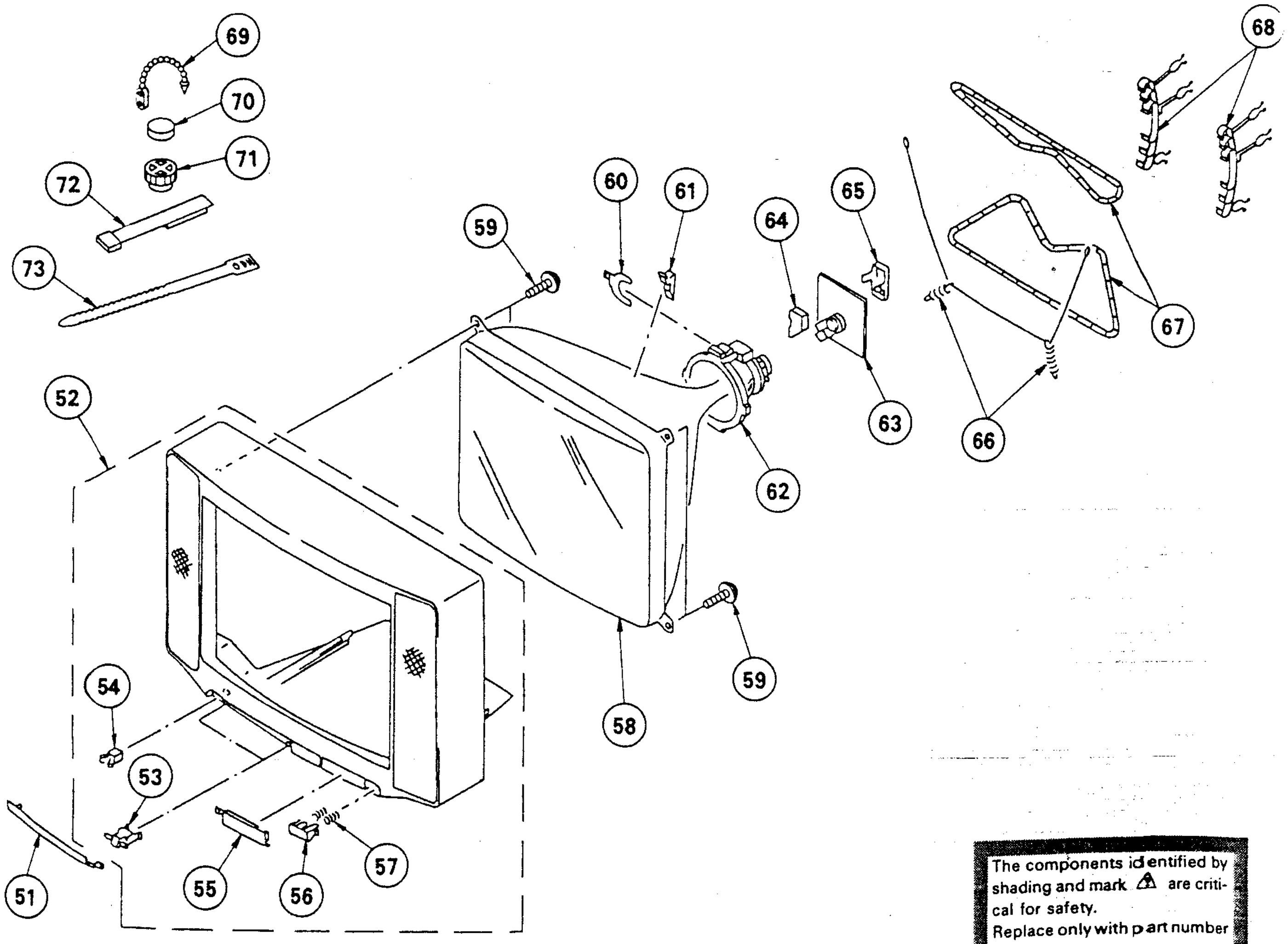
● : BVTP 3 × 12 7-685-648-79

■ : BVTP 4 × 16 7-685-663-79



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	1-544-525-11	SPEAKER	
2	*1-638-391-11	H1 BOARD	
3	*1-638-392-11	H2 BOARD	
4	4-386-611-01	COVER, SWITCH	
5	⚠1-571-433-12	SWITCH, PUSH (AC POWER)	
6	*1-638-390-11	F BOARD	
7	4-200-757-01	COVER, POWER SWITCH	
8	*A-1642-035-A	D BOARD, COMPLETE	
9	⚠1-439-416-51	TRANSFORMER ASSY, FLYBACK (UX-1650)	
10	*3-646-071-00	HOLDER, WIRE	
11	*4-386-624-11	BRACKET, J	
12	*A-1651-018-A	J1 BOARD, COMPLETE	
13	4-200-014-01	BRACKET, TERMINAL	
14	*A-1645-013-A	V BOARD, COMPLETE	
15	*A-1621-046-A	B BOARD, COMPLETE	
16	4-033-072-01	COVER, REAR	
17	*A-1632-022-A	A BOARD, COMPLETE	
18	⚠1-465-301-11	TUNER, ET (UV-816(PLL))	
19	*A-1654-004-A	IFG BOARD, COMPLETE	
20	4-386-618-01	RIVET, T TYPE	
21	⚠1-590-501-11	CORD, POWER (WITH NOISE FILTER)	
22	⚠4-389-201-03	HOLDER, AC CORD	

6-2. PICTURE TUBE (KV-C2161D)



The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

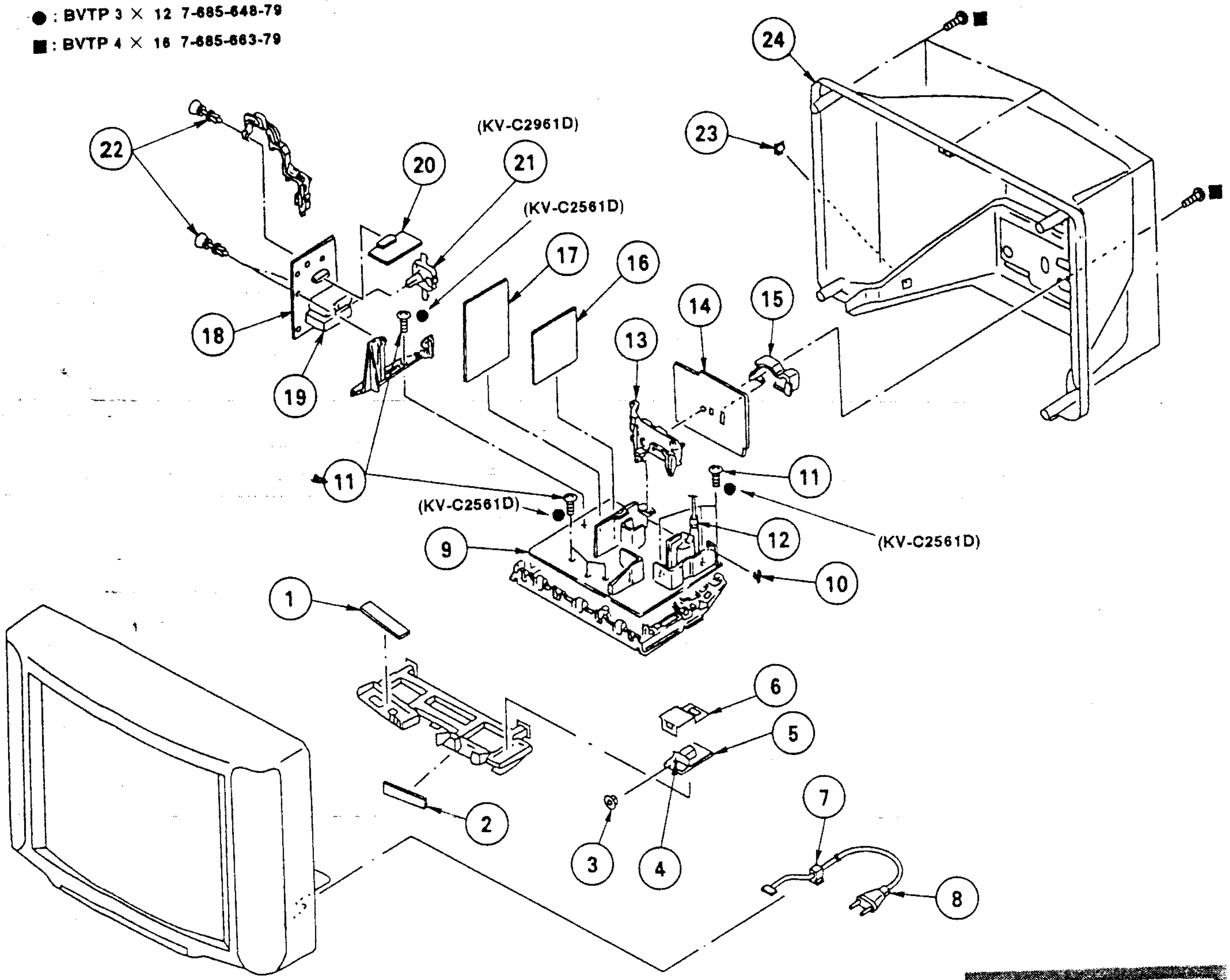
REF.NO.	PART NO.	DESCRIPTION	REMARK
51	X-4029-863-1	DOOR ASSY	
52	X-4029-864-1	CABINET ASSY (WITH BEZEL ASSY)	53~57
53	3-703-035-11	SHAFT, LID	
54	4-392-036-01	CATCHER, PUSH	
55	4-032-993-01	WINDOW, ORNAMENTAL	
56	4-032-990-01	BUTTON, POWER	
57	4-329-112-51	SPRING	
58	⚠ 8-738-758-05	**PICTURE TUBE (A51JXH61X)**	
59	4-036-189-01	SCREW (S), PT	
60	1-452-277-00	MAGNET, BMC	
61	3-704-495-01	SPACER, DY	
62	⚠ 1-451-295-11	DEFLECTION YOKE (Y21PFA2)	

REF.NO.	PART NO.	DESCRIPTION	REMARK
63	*A-1638-014-A	C BOARD, COMPLETE	
64	*4-379-167-01	COVER (MAIN), CV	
65	*4-379-160-01	COVER (REAR LID), CV	
66	4-200-433-01	SPRING, EXTENSION	
67	⚠ 1-426-383-11	COIL, **DEMAGNETIZATION**	
68	*4-386-622-01	BAND, DGC	
69	4-308-870-00	CLIP, LEAD WIRE	
70	1-452-032-00	MAGNET, DISK; 10MM ⌀	
71	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ⌀	
72	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE	
73	3-701-007-00	BAND, BINDING	

6-3. CHASSIS (KV-C2561D/C2961D)

● : BVTP 3 × 12 7-685-648-79

■ : BVTP 4 × 16 7-685-663-79



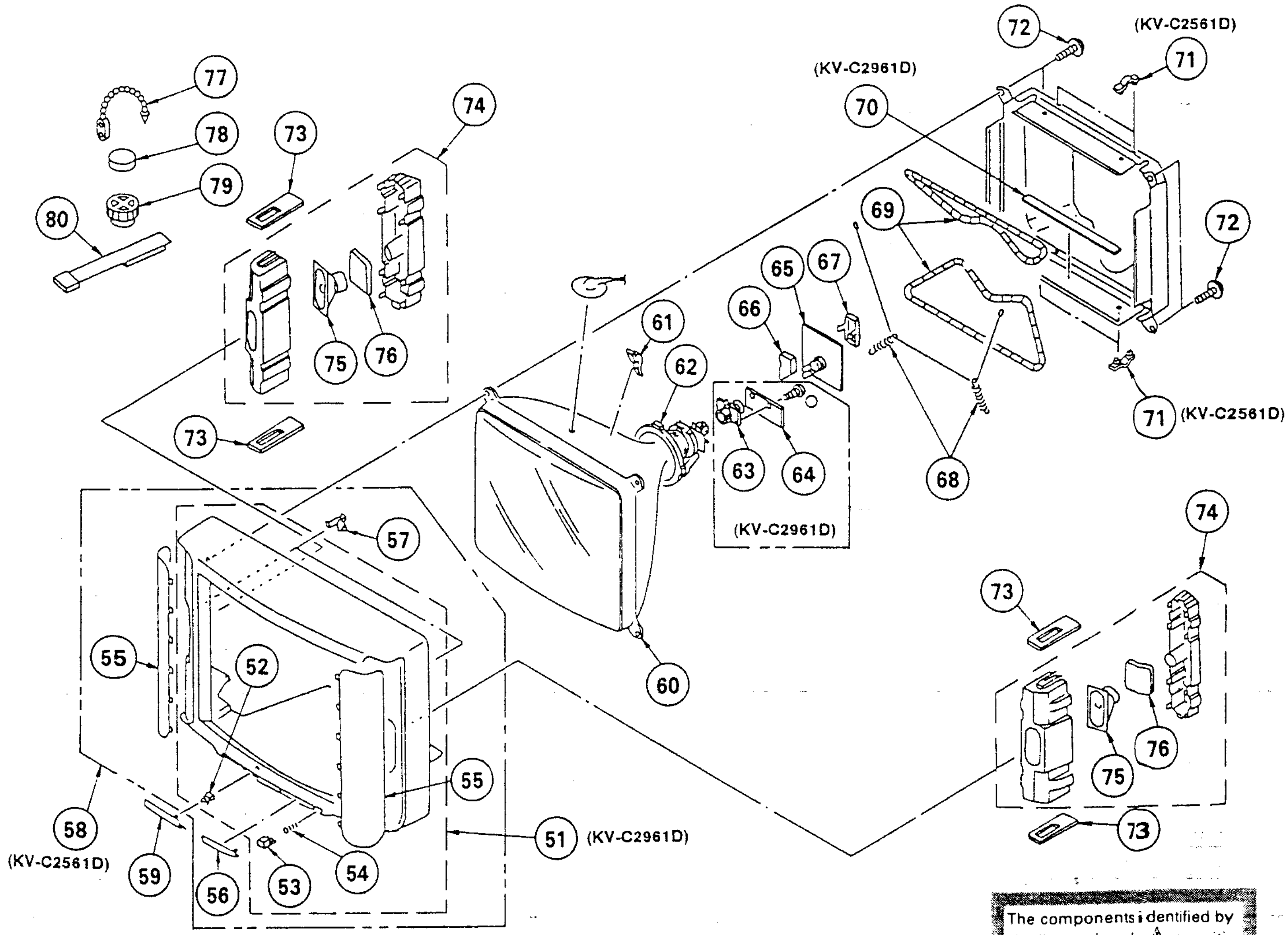
The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
1	* 1-638-744-11	H1 BOARD (KV-C2561D)	
	* 1-638-391-11	H1 BOARD (KV-C2961D)	
2	* 1-638-745-11	H2 BOARD (KV-C2561D)	
	* 1-638-392-11	H2 BOARD (KV-C2961D)	
3	4-386-611-11	COVER, SWITCH (KV-C2561D)	
	4-386-611-01	COVER, SWITCH (KV-C2961D)	
4	⚠ 1-571-433-12	SWITCH, PUSH (AC POWER)	
5	* 1-638-743-11	F BOARD (KV-C2561D)	
	* 1-638-390-11	F BOARD (KV-C2961D)	
6	4-200-274-11	COVER, POWER SWITCH (KV-C2561D)	
	4-200-952-01	COVER, POWER SWITCH (KV-C2961D)	
7	⚠ 4-389-201-11	HOLDER, AC CORD (KV-C2561D)	
	⚠ 4-389-201-03	HOLDER, AC CORD (KV-C2961D)	
8	⚠ 1-590-501-11	CORD, POWER (WITH NOISE FILTER)	
9	* A-1642-062-A	D BOARD, COMPLETE (KV-C2561D)	
	* A-1642-032-A	D BOARD, COMPLETE (KV-C2961D)	
10	* 3-646-071-00	HOLDER, WIRE (KV-C2961D)	
11	4-364-802-00	SCREW (3.5X13) (KV-C2961D)	
12	⚠ 1-439-416-41	TRANSFORMER ASSY, FLYBACK (NX-1604) (KV-C2561D)	
	⚠ 1-439-416-51	TRANSFORMER ASSY, FLYBACK (UX-1650) (KV-C2961D)	

REF.NO.	PART NO.	DESCRIPTION	REMARK
13	*4-386-624-01	BRACKET, J (KV-C2561D)	
	*4-386-624-11	BRACKET, J (KV-C2961D)	
14	*A-1651-023-A	J1 BOARD, COMPLETE (KV-C2561D)	
	*A-1651-038-A	J1 BOARD, COMPLETE (KV-C2961D)	
15	4-200-014-11	BRACKET, TERMINAL (KV-C2561D)	
	4-200-014-01	BRACKET, TERMINAL (KV-C2961D)	
16	*A-1645-022-A	V BOARD, COMPLETE (KV-C2561D)	
	*A-1645-013-A	V BOARD, COMPLETE (KV-C2961D)	
17	*A-1621-041-A	B BOARD, COMPLETE (KV-C2561D)	
	*A-1621-040-A	B BOARD, COMPLETE (KV-C2961D)	
18	*A-1632-054-A	A BOARD, COMPLETE (KV-C2561D)	
	*A-1632-094-A	A BOARD, COMPLETE (KV-C2961D)	
19	⚠ 1-465-301-11	TUNER, ET (UV-816(PLL))	
20	*A-1654-005-A	IFG BOARD, COMPLETE (KV-C2561D)	
	*A-1654-008-A	IFG BOARD, COMPLETE (KV-C2961D)	
21	*4-386-617-01	HOLDER, TERMINAL (KV-C2961D)	
22	4-386-618-01	RIVET, T TYPE	
23	4-202-035-01	COVER, TERMINAL (KV-C2561D)	
	4-202-004-01	COVER, TERMINAL (KV-C2961D)	
24	4-202-032-01	COVER, REAR (KV-C2561D)	
	4-202-014-01	COVER, REAR (KV-C2961D)	

6-4. PICTURE TUBE (KV-C2561D/C2961D)

○ : BVTP 3 × 8 7-685-646-79



The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
51	X-4200-098-1	CABINET ASSY (WITH BEZEL ASSY)	52~54 (KV-C2961D)
52	4-392-036-01	CATCHER, PUSH	
53	4-202-022-01	BUTTON, POWER (KV-C2561D)	
	4-200-991-01	BUTTON, POWER (KV-C2961D)	
54	4-329-112-00	SPRING (KV-C2561D)	
	4-329-112-41	SPRING (KV-C2961D)	
55	X-4200-101-1	PLATE ASSY, ORNAMENTAL (KV-C2561D)	
	X-4200-099-1	PLATE ORNAMENTAL ASSY (KV-C2961D)	
56	4-202-020-01	WINDOW, ORNAMENTAL (KV-C2561D)	
	4-200-989-01	WINDOW, ORNAMENTAL (KV-C2961D)	
57	4-202-023-01	CLIP, CONTACT (KV-C2561D)	
	4-200-992-01	CLIP, CONTACT (KV-C2961D)	
58	X-4200-100-1	CABINET ASSY (WITH BEZEL ASSY)	52~57 (KV-C2561D)
59	4-202-021-01	DOOR (KV-C2561D)	
	4-200-990-01	DOOR (KV-C2961D)	
60	**⚠ 8-733-231-05**	**PICTURE TUBE (A59JWC61X) (KV-C2561D)**	
	⚠ 8-733-831-05	**PICTURE TUBE (A68JYL61X) (KV-C2961D)**	
61	3-704-495-01	SPACER, DY	
62	**⚠ 1-451-311-21**	**DEFLECTION YOKE (Y25FXA) (KV-C2561D)**	
	⚠ 1-451-313-21	**DEFLECTION YOKE (Y29FXA) (KV-C2961D)**	
63	**⚠ 1-452-509-42**	**NECK ASSY, PICTURE TUBE (NA-308)**	(KV-C2961D)
64	*1-634-193-11	VM BOARD (KV-C2961D)	
65	*A-1638-015-A	C BOARD, COMPLETE (KV-C2561D)	
	*A-1638-013-A	C BOARD, COMPLETE (KV-C2961D)	
66	*4-379-167-01	COVER (MAIN), CV	
67	*4-379-160-01	COVER (REAR LID), CV	
68	4-303-774-99	SPRING (KV-C2561D)	
	4-369-318-00	SPRING, TENSION (KV-C2961D)	
69	**⚠ 1-426-372-11**	**COIL, DEMAGNETIZATION (KV-C2561D)**	
	⚠ 1-426-398-11	**COIL, DEMAGNETIZATION (KV-C2961D)**	
70	3-651-853-01	CUSHION (KV-C2961D)	
71	*4-385-916-01	HOLDER (D) (KV-C2561D)	
72	4-373-263-11	SCREW (M), PT (KV-C2561D)	
	4-200-976-01	SCREW, PT (KV-C2961D)	
73	4-202-027-01	CUSHION, BOX (KV-C2561D)	
	4-200-995-01	CUSHION, BOX (KV-C2961D)	
74	A-1678-036-A	BOX COMPLETE ASSY (KV-C2561D)	75,76
	A-1678-048-A	BOX ASSY (KV-C2961D)	75,76
75	1-504-146-11	SPEAKER (5X11CM)	
76	4-202-029-01	STOPPER (KV-C2561D)	
	4-200-999-01	STOPPER (KV-C2961D)	
77	4-308-870-00	CLIP, LEAD WIRE	
78	1-452-032-00	MAGNET, DISK; 10MM ϕ	
79	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
80	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	

SECTION 7
ELECTRICAL PARTS LIST

B

NOTE:

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS
- MF : μF, PF : μμF

COILS
- MMH : mH, UH : μH

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1621-046-A	B BOARD, COMPLETE (KV-C2161D) *****************			
	*A-1621-041-A	B BOARD, COMPLETE (KV-C2561D) *****************			
	*A-1621-040-A	B BOARD, COMPLETE (KV-C2961D) *****************			

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
B72	*1-568-881-51	PIN, CONNECTOR 6P
B73	*1-568-878-51	PIN, CONNECTOR 3P (KV-C2961D)
B31	*1-565-393-11	CONNECTOR, BOARD TO BOARD
B32	*1-565-393-11	CONNECTOR, BOARD TO BOARD
B33	*1-565-393-11	CONNECTOR, BOARD TO BOARD

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C301	1-137-031-11	FILM	0.22MF	10%	100V
C302	1-137-031-11	FILM	0.22MF	10%	100V
C303	1-124-122-11	ELECT	100MF	20%	50V
C304	1-137-031-11	FILM	0.22MF	10%	100V
C305	1-124-119-00	ELECT	330MF	20%	16V
C306	1-124-902-00	ELECT	0.47MF	20%	50V
C307	1-124-902-00	ELECT	0.47MF	20%	50V
C308	1-124-902-00	ELECT	0.47MF	20%	50V
C309	1-124-902-00	ELECT	0.47MF	20%	50V
C310	1-137-098-11	FILM	0.1MF	10%	100V
C311	1-137-098-11	FILM	0.1MF	10%	100V
C312	1-124-902-00	ELECT	0.47MF	20%	50V
C313	1-124-902-00	ELECT	0.47MF	20%	50V
C314	1-124-902-00	ELECT	0.47MF	20%	50V
C315	1-124-903-11	ELECT	1MF	20%	50V
C316	1-137-098-11	FILM	0.1MF	10%	100V
C317	1-124-910-11	ELECT	47MF	20%	50V
C318	1-137-098-11	FILM	0.1MF	10%	100V
C321	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
					(KV-C2161D,C2561D)
C323	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C327	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C330	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C331	1-137-098-11	FILM	0.1MF	10%	100V
C332	1-126-103-11	ELECT	470MF	20%	16V
C333	1-137-102-11	FILM	0.022MF	10%	250V
C334	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C335	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C336	1-102-816-00	CERAMIC	120PF	5%	50V
C337	1-101-004-00	CERAMIC	0.01MF		50V
C338	1-137-098-11	FILM	0.1MF	10%	100V
C339	1-137-098-11	FILM	0.1MF	10%	100V
C341	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C343	1-137-094-11	FILM	0.047MF	10%	100V
C344	1-137-033-11	FILM	0.33MF	10%	100V
C345	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C346	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C347	1-124-903-11	ELECT	1MF	20%	50V
C348	1-124-903-11	ELECT	1MF	20%	50V
C349	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C350	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C351	1-137-102-11	FILM	0.022MF	10%	250V
C352	1-137-102-11	FILM	0.022MF	10%	250V
C353	1-163-063-00	CERAMIC CHIP	0.022MF	10%	50V
C354	1-124-910-11	ELECT	47MF	20%	50V
C357	1-163-377-11	CERAMIC CHIP	100PF	5%	50V
C358	1-124-917-11	ELECT	33MF	20%	50V
C359	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C360	1-101-004-00	CERAMIC	0.01MF		50V
C364	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C365	1-124-910-11	ELECT	47MF	20%	50V
C366	1-126-103-11	ELECT	470MF	20%	16V
C367	1-101-004-00	CERAMIC	0.01MF		50V
C381	1-124-902-00	ELECT	0.47MF	20%	50V
C382	1-124-927-11	ELECT	4.7MF	20%	50V
C384	1-124-910-11	ELECT	47MF	20%	50V
C385	1-124-927-11	ELECT	4.7MF	20%	50V
C386	1-124-927-11	ELECT	4.7MF	20%	50V
					(KV-C2961D)
C387	1-137-027-11	FILM	0.82MF	10%	63V
C388	1-137-098-11	FILM	0.1MF	10%	100V
C401	1-101-361-00	CERAMIC	150PF	5%	50V
C402	1-163-197-00	CERAMIC CHIP	470PF	5%	50V
C403	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1311	1-163-111-00	CERAMIC CHIP	56PF	5%	50V
					(KV-C2161D,C2561D)
	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
					(KV-C2961D)
C1312	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C1313	1-102-953-00	CERAMIC	18PF	5%	50V

<TRIMMER>

REF.NO.	PART NO.	DESCRIPTION
CT331	1-141-418-11	CAP, ADJ (KV-C2161D,C2961D)
	1-141-181-11	CAP, TRIMMER (KV-C2561D)
CT332	1-141-418-11	CAP, ADJ (KV-C2161D,C2961D)
	1-141-181-11	CAP, TRIMMER (KV-C2561D)

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D301	8-719-911-19	DIODE 1SS119
D302	8-719-911-19	DIODE 1SS119
D303	8-719-911-19	DIODE 1SS119
D304	8-719-911-19	DIODE 1SS119
D305	8-719-911-19	DIODE 1SS119
D307	8-719-110-23	DIODE RD11ES-B3
D309	8-719-911-19	DIODE 1SS119

REF.NO.	PART NO.	DESCRIPTION	REMARK
D310	8-719-110-23	DIODE RD11ES-B3	
D311	8-719-110-23	DIODE RD11ES-B3	
D312	8-719-110-23	DIODE RD11ES-B3	
D313	8-719-911-19	DIODE 1SS119	
D314	8-719-911-19	DIODE 1SS119	
D315	8-719-911-19	DIODE 1SS119	
D316	8-719-911-19	DIODE 1SS119	
D317	8-719-911-19	DIODE 1SS119	
D318	8-719-911-19	DIODE 1SS119	
D319	8-719-911-19	DIODE 1SS119	
D320	8-719-911-19	DIODE 1SS119	
D331	8-719-911-19	DIODE 1SS119	
D332	8-719-911-19	DIODE 1SS119	
D333	8-719-911-19	DIODE 1SS119	
D350	8-719-109-89	DIODE RD5.6ES-B2	
		<DELAY LINE>	
DL332	1-236-062-11	MODULE, Y DELAY LINE	
DL401	1-415-613-11	DELAY LINE, Y	
		<IC>	
IC301	8-759-517-43	IC TDA4580-V7	
IC302	8-759-980-60	IC TDA8442N3	
IC303	8-759-140-53	IC UPD4053BC	
IC331	8-759-521-22	IC TDA4650/V4	
IC332	8-759-505-39	IC TDA4660V2	
IC1301	1-235-534-11	CONTROL MODULE, PICTURE	(KV-C2961D)
		<COIL>	
L301	1-410-868-11	INDUCTOR 4.7UH	
L302	1-410-868-11	INDUCTOR 4.7UH	
L303	1-408-406-00	INDUCTOR 5.6UH	(KV-C2161D,C2561D)
L331	1-404-554-11	COIL	
L336	1-404-554-11	COIL	
L338	1-408-409-00	INDUCTOR 10UH	
L1301	1-408-425-00	INDUCTOR 220UH	
L1302	1-408-419-00	INDUCTOR 68UH	
		<TRANSISTOR>	
Q301	8-729-120-28	TRANSISTOR 2SC1623-L5L6	(KV-C2161D,C2561D)
Q303	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q305	8-729-901-06	TRANSISTOR DTA144EK	
Q306	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q311	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q312	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q313	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q316	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q330	8-729-216-22	TRANSISTOR 2SA1162-G	
Q331	8-729-901-00	TRANSISTOR DTC124EK	
Q332	8-729-216-22	TRANSISTOR 2SA1162-G	
Q333	8-729-216-22	TRANSISTOR 2SA1162-G	
Q334	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q335	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q381	8-729-901-00	TRANSISTOR DTC124EK	
Q382	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1301	8-729-901-00	TRANSISTOR DTC124EK	
Q1305	8-729-120-28	TRANSISTOR 2SC1623-L5L6	(KV-C2961D)
Q1306	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<RESISTOR>				
JR385	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W	
JR387	1-216-295-00	METAL GLAZE	0	5%	1/10W	(KV-C2961D)
JR390	1-216-295-00	METAL GLAZE	0	5%	1/10W	(KV-C2161D,C2561D)
R301	1-249-409-11	CARBON	220	5%	1/4W	
R302	1-249-409-11	CARBON	220	5%	1/4W	
R303	1-249-409-11	CARBON	220	5%	1/4W	
R304	1-249-409-11	CARBON	220	5%	1/4W	
R305	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R307	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R308	1-216-296-00	METAL GLAZE	0	5%	1/8W	
R309	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R310	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R311	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R312	1-249-409-11	CARBON	220	5%	1/4W	
R313	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R314	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R315	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R316	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R317	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R318	1-249-429-11	CARBON	10K	5%	1/4W	
R319	1-249-409-11	CARBON	220	5%	1/4W	
R320	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R321	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R322	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R328	1-216-311-00	METAL GLAZE	6.8	5%	1/10W	
R329	1-216-311-00	METAL GLAZE	6.8	5%	1/10W	
R330	1-216-311-00	METAL GLAZE	6.8	5%	1/10W	
R331	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R332	1-216-184-00	METAL GLAZE	270	5%	1/8W	
R333	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R334	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R335	1-247-852-11	CARBON	7.5K	5%	1/4W	
R336	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R337	1-216-184-00	METAL GLAZE	270	5%	1/8W	
R338	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R339	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R341	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R342	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R344	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R346	1-216-202-00	METAL GLAZE	1.5K	5%	1/8W	
R347	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R348	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R349	1-216-045-00	METAL GLAZE	680	5%	1/10W	(KV-C2161D,C2561D)
R350	1-216-045-00	METAL GLAZE	680	5%	1/10W	(KV-C2161D,C2561D)
R351	1-216-033-00	METAL GLAZE	220	5%	1/10W	(KV-C2161D,C2561D)
R354	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R355	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R356	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R357	1-216-033-00	METAL GLAZE	220	5%	1/10W	(KV-C2961D)
R358	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R359	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R360	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R361	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R363	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	

KV-C2161D/C2561D/C2961D
RM-816

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

B **F** **A**

REF.NO.	PART NO.	DESCRIPTION				REMARK
R364	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R365	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R366	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R367	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R370	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R372	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R376	1-249-429-11	CARBON	10K	5%	1/4W	
R377	1-216-037-00	METAL GLAZE	330	5%	1/10W	(KV-C2161D,C2561D)
	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	(KV-C2961D)
R378	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R379	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R380	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R381	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R382	1-216-107-00	METAL GLAZE	270K	5%	1/10W	(KV-C2161D)
	1-216-105-00	METAL GLAZE	220K	5%	1/10W	(KV-C2561D,C2961D)
R383	1-216-115-00	METAL GLAZE	560K	5%	1/10W	
R384	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R385	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R386	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	(KV-C2961D)
R387	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R388	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R389	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R390	1-216-033-00	METAL GLAZE	220	5%	1/10W	(KV-C2161D,C2561D)
	1-216-025-00	METAL GLAZE	100	5%	1/10W	(KV-C2961D)
R392	1-216-021-00	METAL GLAZE	68	5%	1/10W	
R393	1-216-021-00	METAL GLAZE	68	5%	1/10W	
R394	1-216-021-00	METAL GLAZE	68	5%	1/10W	
R395	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R396	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R398	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R401	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R402	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R403	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R404	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R405	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R406	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R407	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R410	1-216-184-00	METAL GLAZE	270	5%	1/8W	
R412	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1301	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1302	1-216-089-00	METAL GLAZE	47K	5%	1/10W	(KV-C2961D)
R1303	1-216-089-00	METAL GLAZE	47K	5%	1/10W	(KV-C2961D)
R1304	1-216-097-00	METAL GLAZE	100K	5%	1/10W	(KV-C2961D)
R1305	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1307	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1308	1-216-295-00	METAL GLAZE	0	5%	1/10W	(KV-C2161D,C2561D)
	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	(KV-C2961D)
R1309	1-216-037-00	METAL GLAZE	330	5%	1/10W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION
RV331	1-238-012-11	RES, ADJ, CARBON 1K

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
X331	1-567-307-11	OSCILLATOR, CRYSTAL	
X332	1-567-131-00	OSCILLATOR, CRYSTAL	

****

REF.NO.	PART NO.	DESCRIPTION	REMARK
	*1-638-390-11	F BOARD *******	(KV-C2161D,C2961D)
	*1-638-743-11	F BOARD *******	(KV-C2561D)
	*4-341-752-01	EYELET	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
F61	*1-580-844-11	PIN, CONNECTOR (POWER)	
F62	*1-580-844-11	PIN, CONNECTOR (POWER)	

<FUSE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
F1601⚠	1-576-231-21	FUSE (H.B.C.) 4A/250V	
	1-533-230-11	HOLDER, FUSE; F1601	

<SWITCH>

REF.NO.	PART NO.	DESCRIPTION	REMARK
S1701⚠	1-571-433-12	SWITCH, PUSH (AC POWER)	

****

REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1632-022-A	A BOARD, COMPLETE *****************	(KV-C2161D)
	*A-1632-054-A	A BOARD, COMPLETE *****************	(KV-C2561D)
	*A-1632-094-A	A BOARD, COMPLETE *****************	(KV-C2961D)

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
A11	*1-565-393-11	CONNECTOR, BOARD TO BOARD	
A12	*1-565-393-11	CONNECTOR, BOARD TO BOARD	
A13	*1-565-503-11	CONNECTOR, BOARD TO BOARD 12P	
A16	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)	(KV-C2161D,C2961D)
A17	*1-564-886-11	PLUG, CONNECTOR 9P	(KV-C2161D.C2961D)
A19	*1-564-881-11	PLUG, CONNECTOR 4P	(KV-C2161D.C2961D)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C101	1-126-233-11	ELECT	22MF	20%	50V	
C102	1-126-103-11	ELECT	470MF	20%	16V	
C104	1-124-910-11	ELECT	47MF	20%	50V	
C106	1-126-233-11	ELECT	22MF	20%	50V	
C108	1-136-165-00	FILM	0.1MF	5%	50V	
C109	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C111	1-124-925-11	ELECT	2.2MF	20%	50V	
C115	1-124-925-11	ELECT	2.2MF	20%	50V	
C127	1-124-122-11	ELECT	100MF	20%	50V	
C128	1-124-910-11	ELECT	47MF	20%	50V	
C129	1-124-910-11	ELECT	47MF	20%	50V	
C138	1-136-165-00	FILM	0.1MF	5%	50V	
C171	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C172	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C177	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C181	1-101-004-00	CERAMIC	0.01MF		50V	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

A IFB

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<IC>				
IC103	8-759-979-62	IC PCF8574				
		<COIL>				
L100	1-410-683-31	INDUCTOR	560UH			
L101	1-408-225-00	INDUCTOR	3.3UH			
L102	1-408-413-00	INDUCTOR	22UH			
L107	1-408-397-00	INDUCTOR	1UH			
		<TRANSISTOR>				
Q113	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q114	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q115	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q116	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q125	8-729-900-89	TRANSISTOR DTC144ES				
Q126	8-729-901-06	TRANSISTOR DTA144EK				
Q181	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
		<RESISTOR>				
JR230	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR252	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR253	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR255	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR256	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR257	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR258	1-216-296-00	METAL GLAZE	0	5%	1/8W	
R101	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R105	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R107	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R108	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R110	1-249-429-11	CARBON	10K	5%	1/4W	
R111	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R116	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R118	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R128	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R129	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R130	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R157	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R158	1-249-409-11	CARBON	220	5%	1/4W	
R159	1-249-409-11	CARBON	220	5%	1/4W	
R161	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R162	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R163	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R164	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R165	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R167	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R168	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R169	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R181	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R182	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R193	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R194	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R195	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R196	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
		<TUNER>				
TU101 ⚠	1-465-301-11	TUNER, ET (UV-816(PLL))				

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<IF BLOCK>				
VIF101	1-466-154-11	IF BLOCK (IFG-389S)				

****

1-466-154-11 IFB BOARD (IF BLOCK IFG-389S)
****

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<CAPACITOR>				
C9	1-163-029-11	CERAMIC CHIP	0.0047MF		50V	
C10	1-124-925-11	ELECT	2.2MF	20%	50V	
C11	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C12	1-163-029-11	CERAMIC CHIP	0.0047MF		50V	
C13	1-163-029-11	CERAMIC CHIP	0.0047MF		50V	
C14	1-124-034-51	ELECT	33MF	20%	16V	
C17	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C18	1-163-107-00	CERAMIC CHIP	39PF	5%	50V	
C19	1-126-176-11	ELECT	220MF	20%	10V	
C20	1-123-382-00	ELECT	3.3MF	20%	50V	
C21	1-163-031-11	CERAMIC CHIP	0.01MF		50V	
C22	1-163-029-11	CERAMIC CHIP	0.0047MF		50V	
C23	1-130-475-00	MYLAR	0.0022MF	5%	50V	
C24	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C25	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C28	1-163-029-11	CERAMIC CHIP	0.0047MF		50V	
C29	1-163-029-11	CERAMIC CHIP	0.0047MF		50V	
C30	1-124-034-51	ELECT	33MF	20%	16V	
C31	1-163-085-00	CERAMIC CHIP	2PF	0.25PF	50V	
C32	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C33	1-124-902-00	ELECT	0.47MF	20%	50V	
C34	1-163-029-11	CERAMIC CHIP	0.0047MF		50V	
C35	1-124-034-51	ELECT	33MF	20%	16V	
		<FILTER>				
CF1	1-404-801-11	TRAP, CERAMIC				
		<CONNECTOR>				
CN1	*1-506-913-11	PIN, CONNECTOR 10P				
		<IC>				
IC1	8-759-996-04	IC TDA8341/N6				
IC2	8-759-516-81	IC TDA2545A-V4				
		<COIL>				
L2	1-408-410-00	INDUCTOR	12UH			
L3	1-408-406-00	INDUCTOR	5.6UH			
L4	1-408-407-00	INDUCTOR	6.8UH			
L6	1-408-397-00	INDUCTOR	1UH			
L7	1-408-406-00	INDUCTOR	5.6UH			
L8	1-408-406-00	INDUCTOR	5.6UH			
		<TRANSISTOR>				
Q1	8-729-920-74	TRANSISTOR 2SC2412K-QR				
Q2	8-729-920-74	TRANSISTOR 2SC2412K-QR				
Q7	8-729-216-22	TRANSISTOR 2SA1162-G				

IFB C

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
JC1	1-216-296-00	METAL GLAZE	0	5%	1/8W	
R9	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R10	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R11	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R12	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R13	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R15	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R16	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R17	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R18	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R19	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R20	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R21	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R22	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R23	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R24	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R30	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R31	1-216-208-00	METAL GLAZE	2.7K	5%	1/8W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION
RV1	1-238-550-11	RES, ADJ, CARBON 100K

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION
T1	1-404-493-31	COIL
T2	1-404-493-31	COIL
T5	1-404-493-31	COIL

****

*A-1638-014-A C BOARD, COMPLETE (KV-C2161D)
****

*A-1638-015-A C BOARD, COMPLETE (KV-C2561D)
****

*A-1638-013-A C BOARD, COMPLETE (KV-C2961D)
****

*4-379-160-01 COVER (REAR LID), CV
*4-379-167-01 COVER (MAIN), CV

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
C71	*1-506-371-00	PIN, CONNECTOR 2P
C72	*1-568-881-51	PIN, CONNECTOR 6P
C81	*1-568-878-51	PIN, CONNECTOR 3P
C82	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C703	1-102-980-00	CERAMIC	270PF	5%	50V	
C704	1-102-116-00	CERAMIC	680PF	10%	50V	
C705	1-102-976-00	CERAMIC	180PF	5%	50V	(KV-C2161D)
	1-102-978-00	CERAMIC	220PF	5%	50V	(KV-C2561D,C2961D)
C706	1-102-116-00	CERAMIC	680PF	10%	50V	
C707	1-162-116-00	CERAMIC	680PF	10%	2KV	
C708	1-162-114-00	CERAMIC	0.0047MF		2KV	
C709	1-102-116-00	CERAMIC	680PF	10%	50V	
C710	1-123-947-00	ELECT	10MF	20%	250V	
C711	1-101-880-00	CERAMIC	47PF	5%	50V	
C712	1-102-980-00	CERAMIC	270PF	5%	50V	
C714	1-124-360-00	ELECT	1000MF	20%	16V	
C716	1-162-622-11	CERAMIC	330PF	10%	400V	
C717	1-102-114-00	CERAMIC	470PF	10%	50V	
C718	1-102-114-00	CERAMIC	470PF	10%	50V	
C719	1-102-114-00	CERAMIC	470PF	10%	50V	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D701	8-719-110-14	DIODE RD9.1ES-B3
D702	8-719-911-19	DIODE 1SS119
D703	8-719-911-19	DIODE 1SS119
D704	8-719-911-19	DIODE 1SS119
D705	8-719-911-19	DIODE 1SS119
D706	8-719-911-19	DIODE 1SS119
D707	8-719-911-19	DIODE 1SS119
D708	8-719-911-19	DIODE 1SS119
D709	8-719-911-19	DIODE 1SS119
D710	8-719-911-19	DIODE 1SS119
D711	8-719-300-33	DIODE RU-3AM
D713	8-719-911-19	DIODE 1SS119

<JACK>

REF.NO.	PART NO.	DESCRIPTION
J701	1-526-990-11	SOCKET, PICTURE TUBE

<COIL>

REF.NO.	PART NO.	DESCRIPTION	
L704	1-408-415-00	INDUCTOR	33UH

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q703	8-729-906-70	TRANSISTOR BF871
Q704	8-729-200-17	TRANSISTOR 2SA1091-0
Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q706	8-729-906-70	TRANSISTOR BF871
Q707	8-729-200-17	TRANSISTOR 2SA1091-0
Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q709	8-729-906-70	TRANSISTOR BF871
Q710	8-729-200-17	TRANSISTOR 2SA1091-0

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R704	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R705	1-202-824-00	SOLID	3.3K	10%	1/2W	
R706	1-249-409-11	CARBON	220	5%	1/4W	
R707	1-247-822-11	CARBON	430	5%	1/4W	(KV-C2161D)
	1-249-412-11	CARBON	390	5%	1/4W	(KV-C2561D,C2961D)
R708	1-249-401-11	CARBON	47	5%	1/4W	
R709	1-202-844-00	SOLID	330K	10%	1/2W	
R710	1-215-469-00	METAL	100K	1%	1/4W	(KV-C2161D)
	1-215-465-00	METAL	68K	1%	1/4W	(KV-C2561D,C2961D)
R711	1-249-426-11	CARBON	5.6K	5%	1/4W	
R712	1-249-417-11	CARBON	1K	5%	1/4W	
R713	1-215-474-00	METAL	160K	1%	1/4W	(KV-C2161D)
	1-215-471-00	METAL	120K	1%	1/4W	(KV-C2561D,C2961D)
R714	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R715	1-202-824-00	SOLID	3.3K	10%	1/2W	
R716	1-249-409-11	CARBON	220	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R717	1-249-415-11	CARBON	680	5%	1/4W	
R718	1-202-814-11	SOLID	33K	20%	1/2W	
R719	1-249-401-11	CARBON	47	5%	1/4W	
R720	1-249-423-11	CARBON	3.3K	5%	1/4W	
R721	1-202-842-11	SOLID	220K	20%	1/2W	
R722	1-202-848-00	SOLID	680K	10%	1/2W	
R723	1-249-417-11	CARBON	1K	5%	1/4W	
R724	1-202-846-00	SOLID	470K	20%	1/2W	
R725	1-202-838-00	SOLID	100K	20%	1/2W	
R726	1-202-824-00	SOLID	3.3K	10%	1/2W	
R727	1-249-409-11	CARBON	220	5%	1/4W	
R728	1-216-347-11	METAL OXIDE	0.68	5%	1W	F
R729	1-249-416-11	CARBON	820	5%	1/4W	
R730	1-249-401-11	CARBON	47	5%	1/4W	
R731	1-249-423-11	CARBON	3.3K	5%	1/4W	
R732	1-249-415-11	CARBON	680	5%	1/4W	
R733	1-249-415-11	CARBON	680	5%	1/4W	
R734	1-249-405-11	CARBON	100	5%	1/4W	
R735	1-215-493-00	METAL	1M	1%	1/4W	
R736	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R737	1-215-483-00	METAL	390K	1%	1/4W	(KV-C2161D)
	1-215-491-00	METAL	820K	1%	1/4W	(KV-C2561D)
	1-215-485-00	METAL	470K	1%	1/4W	(KV-C2961D)
R739	1-249-417-11	CARBON	1K	5%	1/4W	

<VARIABLE RESISTOR>

RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M
RV702	1-230-619-11	RES, ADJ, METAL GLAZE 110M
RV703	1-237-749-11	RES, ADJ, CARBON 2200
RV704	1-237-749-11	RES, ADJ, CARBON 2200

********** ***

*A-1642-035-A D BOARD, COMPLETE (KV-C2161D)
****
*A-1642-062-A D BOARD, COMPLETE (KV-C2561D)
****
*A-1642-032-A D BOARD, COMPLETE (KV-C2961D)
****

*4-341-751-01	EYELET
*4-341-752-01	EYELET
*4-368-683-01	SPRING

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C002	1-163-205-00	CERAMIC CHIP	0.001MF	5%	50V	
C003	1-124-925-11	ELECT	2.2MF	20%	50V	
C004	1-124-120-11	ELECT	220MF	20%	16V	
C005	1-124-903-11	ELECT	1MF	20%	50V	
C008	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C009	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C010	1-124-120-11	ELECT	220MF	20%	16V	
C011	1-163-031-11	CERAMIC CHIP	0.01MF		50V	
C013	1-137-098-11	FILM	0.1MF	10%	100V	
C014	1-137-098-11	FILM	0.1MF	10%	100V	
C015	1-124-902-00	ELECT	0.47MF	20%	50V	
C016	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	
C017	1-137-098-11	FILM	0.1MF	10%	100V	
C018	1-163-127-00	CERAMIC CHIP	270PF	5%	50V	
C019	1-137-094-11	FILM	0.047MF	10%	100V	
C021	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C023	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C024	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C027	1-124-910-11	ELECT	47MF	20%	50V	
C030	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C031	1-163-081-00	CERAMIC CHIP	0.22MF		25V	
C032	1-163-081-00	CERAMIC CHIP	0.22MF		25V	
C033	1-163-181-00	CERAMIC CHIP	100PF	5%	50V	
C034	1-124-907-11	ELECT	10MF	20%	50V	
C251	1-124-903-11	ELECT	1MF	20%	50V	
C252	1-126-233-11	ELECT	22MF	20%	50V	
C253	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C254	1-137-098-11	FILM	0.1MF	10%	100V	
C255	1-124-636-00	ELECT	3300MF	20%	25V	
C261	1-124-903-11	ELECT	1MF	20%	50V	
C262	1-126-233-11	ELECT	22MF	20%	50V	
C263	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C264	1-137-098-11	FILM	0.1MF	10%	100V	
C265	1-124-564-11	ELECT	4700MF	20%	25V	
C270	1-137-035-11	FILM	0.47MF	10%	100V	
C274	1-137-035-11	FILM	0.47MF	10%	100V	
C501	1-124-927-11	ELECT	4.7MF	20%	50V	
C502	1-124-927-11	ELECT	4.7MF	20%	50V	
C503	1-137-049-11	FILM	0.015MF	10%	400V	
C504	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C505	1-108-794-11	MYLAR	0.0015MF	5%	50V	
C506	1-137-102-11	FILM	0.022MF	10%	250V	
C507	1-137-033-11	FILM	0.33MF	10%	100V	
C508	1-137-102-11	FILM	0.022MF	10%	250V	
C509	1-137-098-11	FILM	0.1MF	10%	100V	
C510	1-161-959-00	CERAMIC	22PF	10%	500V	
C511	1-108-686-11	MYLAR	0.0033MF	10%	100V	
C512	1-137-098-11	FILM	0.1MF	10%	100V	
C513	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C514	1-137-031-11	FILM	0.22MF	10%	100V	
C515	1-124-903-11	ELECT	1MF	20%	50V	
C516	1-108-680-11	MYLAR	0.001MF	10%	100V	
C517	1-124-252-00	ELECT	0.33MF	20%	50V	
C518	1-124-902-00	ELECT	0.47MF	20%	50V	
C519	1-136-173-00	FILM	0.47MF	5%	50V	(KV-C2161D,C2561D)
	1-136-171-00	FILM	0.33MF	5%	50V	(KV-C2961D)
C520	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V	
C521	1-137-098-11	FILM	0.1MF	10%	100V	
C522	1-124-122-11	ELECT	100MF	20%	50V	
C523	1-108-680-11	MYLAR	0.001MF	10%	100V	
C524	1-108-798-11	MYLAR	0.0033MF	5%	50V	
C525	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C526	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	(KV-C2161D,C2561D)
	1-163-101-00	CERAMIC CHIP	22PF	5%	50V	(KV-C2961D)
C527	1-137-098-11	FILM	0.1MF	10%	100V	
C531	1-124-190-00	ELECT	680MF	[illegible]	25V	
C532	1-124-122-11	ELECT	100MF	20%	50V	
C533	1-137-096-11	FILM	0.068MF	10%	100V	
C534	1-124-120-11	ELECT	220MF	20%	16V	
C536	1-131-363-00	TANTALUM	4.7MF	10%	16V	(KV-C2161D)
	1-131-365-00	TANTALUM	10MF	10%	16V	(KV-C2561D,C2961D)
C537	1-124-903-11	ELECT	1MF	20%	50V	
C538	1-108-680-11	MYLAR	0.001MF	10%	100V	
C539	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C540	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C592	1-124-122-11	ELECT	100MF	20%	50V
C593	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C601	⚠ 1-161-964-61	CERAMIC	0.0047MF		250V
C602	⚠ 1-161-964-61	CERAMIC	0.0047MF		250V
C603	⚠ 1-161-964-61	CERAMIC	0.0047MF		250V
C604	⚠ 1-125-318-11	ELECT(BLOCK)	220MF	20%	400V
C605	1-124-484-11	ELECT	220MF	20%	35V
C606	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C607	1-137-028-11	FILM	1MF	10%	63V
C608	1-124-927-11	ELECT	4.7MF	20%	50V
C611	1-124-910-11	ELECT	47MF	20%	50V
C612	1-108-680-11	MYLAR	0.001MF	10%	100V
C613	1-136-539-11	FILM	0.0022MF	3%	2KV
C614	1-102-030-00	CERAMIC	330PF	10%	500V
C615	1-128-142-11	ELECT	1500MF	20%	25V
C616	1-102-030-00	CERAMIC	330PF	10%	500V
C617	1-124-120-11	ELECT	220MF	20%	25V
					(KV-C2161D)
	1-124-122-11	ELECT	100MF	20%	50V
					(KV-C2561D,C2961D)
C618	1-162-115-00	CERAMIC	330PF	10%	2KV
C619	1-128-320-11	ELECT	2200MF	20%	16V
					(KV-C2161D,C2961D)
	1-124-556-11	ELECT	2200MF	20%	16V
					(KV-C2561D)
C620	1-137-028-11	FILM	1MF	10%	63V
					(KV-C2161D)
	1-136-173-00	FILM	0.47MF	5%	50V
					(KV-C2561D,C2961D)
C621	1-124-347-00	ELECT	100MF	20%	160V
C622	1-128-320-11	ELECT	2200MF	20%	16V
C623	1-124-910-11	ELECT	47MF	20%	50V
C624	1-124-122-11	ELECT	100MF	20%	50V
C625	1-124-360-00	ELECT	1000MF	20%	16V
C626	1-124-907-11	ELECT	10MF	20%	50V
C627	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C631	1-124-927-11	ELECT	4.7MF	20%	50V
C632	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C633	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C801	1-126-105-11	ELECT	1000MF	20%	35V
C802	1-102-030-00	CERAMIC	330PF	10%	500V
C804	1-123-948-00	ELECT	22MF	20%	250V
C805	1-162-114-00	CERAMIC	0.0047MF		2KV
C806	1-137-098-11	FILM	0.1MF	10%	100V
C807	1-106-395-00	MYLAR	0.15MF	10%	200V
C810	1-123-024-21	ELECT	33MF		160V
C811	1-136-111-00	FILM	1MF	5%	200V
					(KV-C2161D)
	1-136-113-00	FILM	2MF	5%	200V
					(KV-C2561D,C2961D)
C812	1-124-634-11	ELECT	1MF	20%	250V
C813	1-102-212-00	CERAMIC	820PF	10%	500V
C814	⚠ 1-161-731-51	CERAMIC	0.001MF	10%	2KV
C815	1-136-111-00	FILM	1MF	5%	200V
					(KV-C2161D,C2561D)
	1-136-540-11	FILM	0.82MF	5%	200V
					(KV-C2961D)
C817	⚠ 1-136-549-11	FILM	0.0106MF	3%	1.4KV
					(KV-C2161D)
	⚠ 1-136-565-11	FILM	0.015MF	3%	1.4KV
					(KV-C2561D)
	⚠ 1-136-591-11	FILM	0.017MF	3%	1.4KV
					(KV-C2961D)
C818	⚠ 1-129-721-51	FILM	0.039MF	10%	630V
C819	⚠ 1-161-731-51	CERAMIC	0.001MF	10%	2KV
C820	1-137-046-11	FILM	0.0082MF	10%	400V
C821	⚠ 1-162-116-51	CERAMIC	680PF	10%	2KV
					(KV-C2161D,C2561D)
	⚠ 1-162-134-51	CERAMIC	470PF	10%	2KV
					(KV-C2961D)
C822	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C823	1-137-043-11	FILM	0.0047MF	10%	400V
C824	1-102-212-00	CERAMIC	820PF	10%	500V
C825	1-137-102-11	FILM	0.022MF	10%	250V
C1601	⚠ 1-136-518-11	FILM	0.33MF	20%	300V
C1602	⚠ 1-136-519-11	FILM	0.47MF	20%	300V
C1603	⚠ 1-164-246-61	CERAMIC	0.0022MF	20%	400V
C1605	⚠ 1-164-246-61	CERAMIC	0.0022MF	20%	400V
C1607	⚠ 1-161-964-61	CERAMIC	0.0047MF		250V

<FILTER>

REF.NO.	PART NO.	DESCRIPTION
CF001	1-577-364-11	VIBRATOR, CERAMIC
CF501	1-567-888-11	OSCILLATOR, CERAMIC

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
D1	*1-568-881-51	PIN, CONNECTOR 6P
D2	*1-568-882-51	PIN, CONNECTOR 7P
D11	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR
D12	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR
D18	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)
		(KV-C2161D,C2961D)
D21	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR
D22	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR
D31	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR
D32	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR
D33	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR
D41	*1-566-367-11	CONNECTOR, HINGE (RECEPTACE)
D44	*1-568-881-51	PIN, CONNECTOR 6P
D45	*1-568-881-51	PIN, CONNECTOR 6P
D51	*1-566-367-11	CONNECTOR, HINGE (RECEPTACE)
D62	*1-565-395-11	PIN, CONNECTOR 3P
D65	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P
D66	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
D82	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P
D83	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
D84	*1-580-798-11	CONNECTOR PIN (DY) 6P
D88	*1-568-878-51	PIN, CONNECTOR 3P (KV-C2961D)
D801	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D001	8-719-109-97	DIODE RD6.8ES-B2
D002	8-719-109-97	DIODE RD6.8ES-B2
D003	8-719-911-19	DIODE 1SS119
D005	8-719-109-89	DIODE RD5.6ES-B2
D006	8-719-982-24	DIODE MTZJ-33A
D007	8-719-982-08	DIODE MTZJ-3.9B
D009	8-719-109-89	DIODE RD5.6ES-B2
D010	8-719-921-54	DIODE MTZJ-6.2B
D011	8-719-921-54	DIODE MTZJ-6.2B
D012	8-719-911-19	DIODE 1SS119
D013	8-719-109-97	DIODE RD6.8ES-B2
D271	8-719-110-31	DIODE RD12ES-B2 (KV-C2161D,C2561D)
	8-719-921-88	DIODE MTZJ-13B (KV-C2961D)
D272	8-719-911-19	DIODE 1SS119

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
D501	8-719-911-19	DIODE 1SS119	
D504	8-719-911-55	DIODE U05G	
D506	8-719-800-76	DIODE 1SS226 (KV-C2161D, C2561D)	
D508	8-719-911-19	DIODE 1SS119	
D509	8-719-911-19	DIODE 1SS119 (KV-C2561D, C2961D)	
D511	8-719-911-55	DIODE U05G	
D512	8-719-911-55	DIODE U05G	
D513	8-719-010-34	DIODE UZ-4.7BSC	
D514	8-719-911-19	DIODE 1SS119 (KV-C2961D)	
D515	8-719-911-19	DIODE 1SS119 (KV-C2961D)	
D601	⚠ 8-719-510-63	DIODE D4SB60L-F	
D602	8-719-300-33	DIODE RU-3AM	
D603	8-719-911-55	DIODE U05G	
D604	8-719-911-55	DIODE U05G	
D605	8-719-911-55	DIODE U05G	
D606	8-719-300-33	DIODE RU-3AM	
D607	8-719-300-33	DIODE RU-3AM	
D608	8-719-300-33	DIODE RU-3AM	
D609	8-719-982-24	DIODE MTZJ-33A	
D610	8-719-300-59	DIODE CTU-12S	
D611	8-719-900-26	DIODE ERD29-08J	
D612	8-719-300-59	DIODE CTU-12S	
D613	8-719-979-85	DIODE EGP20G	
D614	8-719-979-85	DIODE EGP20G	
D616	8-719-921-54	DIODE MTZJ-6.2B	
D617	8-719-911-19	DIODE 1SS119	
D618	8-719-109-89	DIODE RD5.6ES-B2	
D619	8-719-982-24	DIODE MTZJ-33A	
D620	8-719-800-76	DIODE 1SS226	
D621	8-719-982-24	DIODE MTZJ-33A	
D622	8-719-911-19	DIODE 1SS119	
D623	8-719-911-19	DIODE 1SS119	
D624	8-719-911-19	DIODE 1SS119	
D630	8-719-921-91	DIODE MTZJ-15A	
D801	8-719-300-33	DIODE RU-3AM	
D802	8-719-300-33	DIODE RU-3AM	
D803	8-719-976-64	DIODE RGP02-17	
D804	8-719-911-55	DIODE U05G	
D805	8-719-911-55	DIODE U05G	
D806	8-719-945-80	DIODE ERC06-15S	
D807	8-719-945-80	DIODE ERC06-15S (KV-C2561D, C2961D)	
D808	8-719-928-08	DIODE ERD28-08S (KV-C2161D)	
	8-719-900-26	DIODE ERD29-08J (KV-C2561D, C2961D)	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC001	8-759-047-60	IC SDA20560-A012	
IC002	8-759-000-47	IC MC14051BCP	
IC003	8-759-945-58	IC RC4558P	
IC005	8-759-748-56	IC SDA2546	
IC251	8-759-988-94	IC TDA2050	
	4-812-134-00	RIVET NYLON, 3.5; IC251	
IC261	8-759-988-94	IC TDA2050	
	4-812-134-00	RIVET NYLON, 3.5; IC261	
IC501	8-759-970-73	IC TEA2028B	
IC502	8-759-944-57	IC TDA8170	
IC601	8-759-988-95	IC TEA2260	
IC604	8-759-510-52	IC TEA7605	
IC608	8-759-929-62	IC LM7812CT	

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L501	1-408-225-00	INDUCTOR 3.3UH	
L601	1-420-872-00	COIL, AIR CORE	
L602	1-410-396-41	FERRITE BEAD INDUCTOR	
L603	1-410-396-41	FERRITE BEAD INDUCTOR	
L604	1-410-671-31	INDUCTOR 47UH	
L605	1-459-585-11	COIL (WITH CORE) (DRUM TYPE)	
L606	1-412-529-11	INDUCTOR 22UH	
L607	1-410-671-31	INDUCTOR 47UH	
L801	1-459-087-00	COIL, HCC DUST CORE 3.9MMH (KV-C2961D)	
L803	1-459-104-00	COIL, WITH CORE	
L804	1-408-239-00	INDUCTOR 4.7MMH	
L805	1-459-652-12	HLC (KV-C2161D)	
	1-459-755-11	COIL, HORIZONTAL LINEARITY (KV-C2561D)	
	1-459-907-11	COIL, HORIZONTAL LINEARITY (KV-C2961D)	
L806	1-459-115-00	COIL, DCC-H (KV-C2161D)	
	1-459-111-00	COIL, DRAM CORE (CDI) (KV-C2561D)	
	1-459-087-00	COIL, HCC DUST CORE 3.9MMH (KV-C2961D)	
L809	1-420-872-00	COIL, AIR CORE	
L810	1-459-390-00	COIL (WITH CORE) (KV-C2161D)	
	1-421-982-11	PMC (KV-C2561D)	
	1-421-794-21	TRANSFORMER, FERRITE (PMT) (KV-C2961D)	

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
LF1601	⚠ 1-421-866-12	LFT	
LF1602	⚠ 1-421-776-21	LFT	
LF1603	⚠ 1-421-862-11	LFT	
T601	⚠ 1-450-038-11	S.R.T (KV-C2161D, C2561D)	
	⚠ 1-450-037-11	S.R.T (KV-C2961D)	
T602	⚠ 1-424-277-11	TRANSFORMER, TRIGGER PULSE	
T801	⚠ 1-437-090-21	HDT	
T802	⚠ 1-439-416-51	TRANSFORMER ASSY, FLYBACK (UX-1650) (KV-C2161D, C2961D)	
	⚠ 1-439-416-41	TRANSFORMER ASSY, FLYBACK (NX-1604) (KV-C2561D)	

<IC LINK>

REF.NO.	PART NO.	DESCRIPTION	REMARK
PS601	⚠ 1-532-984-91	LINK, IC 2A	
PS602	⚠ 1-532-984-91	LINK, IC 2A	
PS603	⚠ 1-532-679-91	LINK, IC 0.6A	
PS604	⚠ 1-532-984-91	LINK, IC 2A	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q001	8-729-901-01	TRANSISTOR DTC144EK	
Q002	8-729-901-01	TRANSISTOR DTC144EK	
Q003	8-729-216-22	TRANSISTOR 2SA1162-G	
Q004	8-729-216-22	TRANSISTOR 2SA1162-G	
Q005	8-729-901-01	TRANSISTOR DTC144EK	
Q006	8-729-901-01	TRANSISTOR DTC144EK	
Q007	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q008	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q009	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q010	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q251	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q261	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q271	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q502	8-729-216-22	TRANSISTOR 2SA1162-G	
Q505	8-729-140-96	TRANSISTOR 2SD774-34	
Q506	8-729-140-97	TRANSISTOR 2SB734-34	
Q507	8-729-216-22	TRANSISTOR 2SA1162-G	
Q598	8-729-216-22	TRANSISTOR 2SA1162-G	
Q601	8-729-122-03	TRANSISTOR 2SA1220A-P	
Q602	8-729-209-02	TRANSISTOR 2SD1548-LB	
Q603	8-729-122-03	TRANSISTOR 2SA1220A-P	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
Q604	8-729-216-22	TRANSISTOR 2SA1162-G	
Q605	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q606	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q607	8-729-920-92	TRANSISTOR 2SD2096-EF	
Q608	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q609	8-729-320-62	TRANSISTOR 2SD789-34	
Q801	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q804	8-729-304-50	TRANSISTOR 2SD1941-06	
Q805	8-729-119-80	TRANSISTOR 2SC2688-LK	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR1	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR3	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR4	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR7	1-216-296-00	METAL GLAZE	0	5%	1/8W	
R001	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R002	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R003	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R004	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R005	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R006	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R007	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R008	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R009	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R010	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R012	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R013	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R014	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R015	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R016	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R017	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R018	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R019	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R020	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R021	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R022	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R024	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R025	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R026	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R027	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R028	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R029	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R030	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R031	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R032	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R033	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R034	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R035	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R036	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R037	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R038	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R039	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R040	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R041	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R042	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R043	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R044	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R045	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R046	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R047	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R048	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R049	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R050	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R051	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R052	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R053	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R054	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R055	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R056	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R057	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R058	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R059	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R060	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R061	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R062	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R063	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R064	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R065	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R066	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R067	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R068	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R069	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R070	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R071	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R072	1-216-222-00	METAL GLAZE	10K	5%	1/8W	
R073	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R075	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R076	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R077	1-216-049-00	METAL GLAZE	1K	5%	1/10W	(KV-C2161D, C2961D)
R078	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R079	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R080	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R081	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R083	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R084	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R085	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R086	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R087	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R088	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R093	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R094	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R095	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R096	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R098	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R251	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R252	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R253	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R254	1-216-357-00	METAL OXIDE	4.7	5%	1W	F
R255	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R256	1-216-115-00	METAL GLAZE	560K	5%	1/10W	
R257	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R258	1-215-869-11	METAL OXIDE	1K	5%	1W	F
R259	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R261	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R262	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R263	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R264	1-216-357-00	METAL OXIDE	4.7	5%	1W	F
R265	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R266	1-216-115-00	METAL GLAZE	560K	5%	1/10W	
R267	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R268	1-215-869-11	METAL OXIDE	1K	5%	1W	F
R269	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R270	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R271	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R272	1-216-073-00	METAL GLAZE	10K	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R273	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R274	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R500	1-216-115-00	METAL GLAZE	560K	5%	1/10W	
R501	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R502	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R503	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R504	1-249-420-11	CARBON	1.8K	5%	1/4W	
R505	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R506	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R509	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R510	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R514	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R515	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R517	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R518	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R519	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R520	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R521	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R522	1-215-469-00	METAL	100K	1%	1/4W	
R523	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R524	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R525	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
						(KV-C2161D,C2561D)
R526	1-249-409-11	CARBON	220	5%	1/4W	F
R527	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R528	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R529	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R530	1-249-448-11	CARBON	1.2	5%	1/4W	F
R531	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
						(KV-C2561D,C2961D)
R532	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
						(KV-C2561D,C2961D)
R533	1-216-031-00	METAL GLAZE	180	5%	1/10W	
						(KV-C2161D)
	1-216-295-00	METAL GLAZE	0	5%	1/10W	
						(KV-C2561D,C2961D)
R534	1-216-119-00	METAL GLAZE	820K	5%	1/10W	
R535	1-249-753-15	CARBON	4.7M	5%	1/4W	
						(KV-C2161D)
	1-249-749-00	CARBON	2.2M	5%	1/4W	
						(KV-C2561D,C2961D)
R536	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W	
R537	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R538	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R539	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R540	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R541	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R542	1-216-308-00	METAL GLAZE	4.7	5%	1/10W	
R543	1-249-451-11	CARBON	2.2	5%	1/4W	
R544	1-247-745-11	CARBON	330	5%	1/2W	
R545	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
						(KV-C2161D)
	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
						(KV-C2561D,C2961D)
R546	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R547	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
						(KV-C2161D)
	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
						(KV-C2561D,C2961D)
R548	1-216-350-11	METAL OXIDE	1.2	5%	1W	F
						(KV-C2161D)
	1-216-349-00	METAL OXIDE	1	5%	1W	F
						(KV-C2561D,C2961D)
R549	1-215-890-11	METAL OXIDE	470	5%	2W	F
						(KV-C2161D)

REF.NO.	PART NO.	DESCRIPTION				REMARK
R549	1-216-454-11	METAL OXIDE	390	5%	2W	F
						(KV-C2561D,C2961D)
R550	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R551	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W	
R552	1-216-433-00	METAL OXIDE	1.2K	5%	1W	F
						(KV-C2161D)
R553	1-215-869-11	METAL OXIDE	1K	5%	1W	
R554	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R555	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W	
R556	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R557	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R558	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R559	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R560	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R561	1-216-107-00	METAL GLAZE	270K	5%	1/10W	
						(KV-C2961D)
R570	1-216-045-00	METAL GLAZE	680	5%	1/10W	
						(KV-C2961D)
R591	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R592	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R593	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R594	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R597	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R598	1-215-900-11	METAL OXIDE	22K	5%	2W	F
R600	1-249-381-11	CARBON	1	5%	1/4W	
						(KV-C2561D,C2961D)
R601	1-216-353-00	METAL OXIDE	2.2	5%	1W	F
R603	1-215-906-11	METAL OXIDE	15	5%	3W	F
						(KV-C2161D)
	1-216-469-11	METAL OXIDE	12	5%	3W	F
						(KV-C2561D,C2961D)
R604	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R605	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R606	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R607	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
						(KV-C2161D,C2561D)
	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
						(KV-C2961D)
R608	1-216-488-11	METAL OXIDE	18K	5%	3W	F
R609	1-216-007-00	METAL GLAZE	18	5%	1/10W	
R610	1-244-941-00	CARBON	680K	5%	1/2W	
R611	1-216-015-00	METAL GLAZE	39	5%	1/10W	
R612	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R613	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R614	1-205-758-11	WIREWOUND	100	10%	10W	F
R616	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R617	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R618	1-216-431-11	METAL OXIDE	560	5%	1W	F
R619	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R620	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R621	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R622	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R623	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R624	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R625	1-215-865-11	METAL OXIDE	220	5%	1W	F
R626	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R628	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R629	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R631	1-216-465-11	METAL OXIDE	27K	5%	2W	
						(KV-C2161D, C2561D)
R633	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R634	1-216-430-11	METAL OXIDE	390	5%	1W	F

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R635	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R636	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R643	1-217-190-21	WIREWOUND	0.15	5%	2W	F (KV-C2161D)
	1-217-189-21	WIREWOUND	0.12	5%	2W	F (KV-C2561D, C2961D)
R651	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R653	1-205-758-11	WIREWOUND	100	10%	10W	F
R802	1-249-443-11	CARBON	0.47	5%	1/4W	F
R805	1-249-448-11	CARBON	1.2	5%	1/4W	F
R806	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R807	1-217-778-11	FUSIBLE	1K	5%	1W	F
R809	1-202-821-11	SOLID	1.8K	10%	1/2W	
R810	1-202-818-00	SOLID	1K	10%	1/2W	
R811	1-215-863-11	METAL OXIDE	100	5%	1W	F (KV-C2161D)
	1-215-882-00	METAL OXIDE	22	5%	2W	F (KV-C2561D, C2961D)
R812	1-247-285-00	CARBON	75K	5%	1/2W	(KV-C2161D)
	1-249-494-11	CARBON	68K	5%	1/2W	(KV-C2561D)
	1-247-281-00	CARBON	51K	5%	1/2W	(KV-C2961D)
R815	1-215-884-11	METAL OXIDE	47	5%	2W	F
R816	1-215-868-00	METAL OXIDE	680	5%	1W	F
R817	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R820	1-249-403-11	CARBON	68	5%	1/4W	
R821	1-247-725-11	CARBON	10K	5%	1/4W	F
R822	1-217-778-11	FUSIBLE	1K	5%	1W	F
R825	1-216-349-00	METAL OXIDE	1	5%	1W	F (KV-C2161D)
	1-216-345-11	METAL OXIDE	0.47	5%	1W	F (KV-C2561D, C2961D)
R826	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R827	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R828	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R829	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R831	1-249-451-11	CARBON	2.2	5%	1/4W	
R1601⚠	1-246-513-75	CARBON	47K	5%	1/4W	
R1602⚠	1-244-945-91	CARBON	1M	5%	1/2W	
R1603⚠	1-217-328-11	WIREWOUND	2.7	10%	7W	F
R1604⚠	1-246-513-75	CARBON	47K	5%	1/4W	
R1605A⚠	1-218-265-91	METAL GLAZE	8.2M	5%	1W	
R5501	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5503	1-216-308-00	METAL GLAZE	4.7	5%	1/10W	(KV-C2161D, C2561D)
	1-216-001-00	METAL GLAZE	10	5%	1/10W	(KV-C2961D)
R5504	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R5505	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R5506	1-216-075-00	METAL GLAZE	12K	5%	1/10W	(KV-C2961D)

<VARIABLE RESISTOR>

RV501	1-238-013-11	RES, ADJ, CARBON 2.2K
RV502	1-238-016-11	RES, ADJ, CARBON 10K
RV601	1-238-011-11	RES, ADJ, CARBON 470

<SPARK GAP>

SG801	1-519-422-11	GAP, SPARK

REF.NO.	PART NO.	DESCRIPTION	REMARK

<THERMISTOR>

THP601⚠	1-808-059-32	THERMISTOR, POSITIVE

****

*1-634-193-11 VM BOARD (KV-C2961D)
****

<CAPACITOR>

C751	1-101-361-00	CERAMIC	150PF	5%	50V
C752	1-108-629-11	MYLAR	0.018MF	10%	100V
C753	1-137-047-11	FILM	0.01MF	10%	400V
C754	1-102-980-00	CERAMIC	270PF	5%	50V
C757	1-108-692-11	MYLAR	0.01MF	10%	200V
C759	1-124-907-11	ELECT	10MF	20%	50V
C760	1-124-917-11	ELECT	33MF	20%	50V
C761	1-101-006-00	CERAMIC	0.047MF		50V
C762	1-137-047-11	FILM	0.01MF	10%	400V

<COIL>

L751	1-408-413-00	INDUCTOR	22UH
L770	1-410-665-31	INDUCTOR	15UH

<TRANSISTOR>

Q751	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q752	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q753	8-729-140-97	TRANSISTOR 2SB734-34
Q754	8-729-140-96	TRANSISTOR 2SD774-34

<RESISTOR>

R751	1-249-418-11	CARBON	1.2K	5%	1/4W	
R752	1-249-426-11	CARBON	5.6K	5%	1/4W	
R753	1-249-414-11	CARBON	560	5%	1/4W	
R754	1-249-434-11	CARBON	27K	5%	1/4W	
R755	1-249-405-11	CARBON	100	5%	1/4W	
R756	1-249-419-11	CARBON	1.5K	5%	1/4W	
R757	1-249-405-11	CARBON	100	5%	1/4W	
R758	1-249-409-11	CARBON	220	5%	1/4W	
R760	1-249-411-11	CARBON	330	5%	1/4W	
R761	1-249-429-11	CARBON	10K	5%	1/4W	
R762	1-247-895-00	CARBON	470K	5%	1/4W	
R763	1-249-429-11	CARBON	10K	5%	1/4W	
R764	1-249-389-11	CARBON	4.7	5%	1/4W	F
R765	1-249-389-11	CARBON	4.7	5%	1/4W	F
R766	1-247-753-11	CARBON	1.2K	5%	1/2W	
R767	1-247-751-11	CARBON	820	5%	1/2W	
R768	1-215-887-00	METAL OXIDE	150	5%	2W	F
R769	1-212-889-00	FUSIBLE	220	5%	1/4W	F

<CONNECTOR>

VM73	*1-568-878-51	PIN, CONNECTOR 3P
VM88	*1-568-878-51	PIN, CONNECTOR 3P

****

*A-1645-013-A V BOARD, COMPLETE (KV-C2161D, C2961D)
****

*A-1645-022-A V BOARD, COMPLETE (KV-C2561D)
****

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C1	1-126-101-11	ELECT	100MF	20%	16V
C2	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3	1-124-120-11	ELECT	220MF	20%	16V
C4	1-163-077-00	CERAMIC CHIP	0.1MF		50V
C5	1-124-120-11	ELECT	220MF	20%	16V
C6	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C7	1-163-235-11	CERAMIC CHIP	22PF	5%	50V (KV-C2561D)
C8	1-163-235-11	CERAMIC CHIP	22PF	5%	50V (KV-C2561D)
C9	1-163-235-11	CERAMIC CHIP	22PF	5%	50V (KV-C2561D)
C10	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C11	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C12	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C13	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C14	1-124-927-11	ELECT	4.7MF	20%	50V
C15	1-126-233-11	ELECT	22MF	20%	50V
C16	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C17	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C18	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C26	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C27	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C28	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C29	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C32	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C33	1-163-038-00	CERAMIC CHIP	0.1MF		25V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CNV1	*1-565-393-11	CONNECTOR, BOARD TO BOARD
CNV2	*1-565-393-11	CONNECTOR, BOARD TO BOARD

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D1	8-719-105-91	DIODE RD5.6M-B2
D3	8-719-914-44	DIODE DAP202K (KV-C2161D, C2961D)
	8-719-104-34	DIODE 1S2836 (KV-C2561D)
D4	8-719-400-18	DIODE MA152WK
D5	8-719-914-44	DIODE DAP202K (KV-C2161D, C2961D)
	8-719-104-34	DIODE 1S2836 (KV-C2561D)
D6	8-719-400-18	DIODE MA152WK
D7	8-719-105-52	DIODE RD3.6M-B2
D9	8-719-106-17	DIODE RD6.8M-B2

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC1	8-759-039-18	IC SDA20162-B002
IC2	8-759-045-54	IC SAA5246P/E/M4A
IC3	8-759-510-49	IC FCB61C65L-70P

<COIL>

REF.NO.	PART NO.	DESCRIPTION	
L1	1-408-403-00	INDUCTOR	3.3UH
L2	1-408-407-00	INDUCTOR	6.8UH
L3	1-408-407-00	INDUCTOR	6.8UH
L4	1-408-407-00	INDUCTOR	6.8UH

<IC LINK>

REF.NO.	PART NO.	DESCRIPTION
PS1	⚠1-532-679-91	LINK, IC 0.6A

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1	8-729-900-53	TRANSISTOR DTC114EK	
Q2	8-729-920-92	TRANSISTOR 2SD2096-EF	
Q3	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q4	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q5	8-729-807-87	TRANSISTOR 2SB1295-UL6	
Q6	8-729-807-87	TRANSISTOR 2SB1295-UL6	
Q7	8-729-807-87	TRANSISTOR 2SB1295-UL6	
Q8	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR01	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR02	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR03	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR08	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR09	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR11	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR14	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR17	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR18	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR19	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR20	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR21	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR23	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR24	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR25	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR26	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR201	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR204	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR207	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR208	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR211	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR213	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR219	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR220	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR223	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1	1-218-326-11	METAL GLAZE	470	5%	1/2W	
R3	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R4	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R5	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R6	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R7	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R8	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R9	1-216-308-00	METAL GLAZE	4.7	5%	1/10W	
R02	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R10	1-218-325-11	METAL GLAZE	120	5%	1/4W	
R11	1-218-325-11	METAL GLAZE	120	5%	1/4W	
R12	1-218-325-11	METAL GLAZE	120	5%	1/4W	
R13	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R14	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R15	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R16	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R17	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R18	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R19	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R20	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R21	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R22	1-216-168-00	METAL GLAZE	56	5%	1/8W	
R23	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R24	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R25	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	

V H2 H1 J1

REF.NO.	PART NO.	DESCRIPTION				REMARK
R26	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R27	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R28	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R34	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R35	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R40	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R41	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R42	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R44	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R46	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R47	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R49	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R50	1-216-296-00	METAL GLAZE	0	5%	1/8W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION
RV1	1-238-012-11	RES, ADJ, CARBON 1K

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION
X1	1-579-266-31	CRYSTAL VIBRATOR
X2	1-577-364-11	VIBRATOR, CERAMIC

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*1-638-392-11 H2 BOARD (KV-C2161D,C2961D)
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*1-638-745-11 H2 BOARD (KV-C2561D)
****

*4-374-987-01 GUIDE, LIGHT
*4-381-686-01 BRACKET (B), LIGHT GUIDE

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D1651	8-719-948-31	DIODE LD-201VR
	*4-201-076-01	HOLDER, LED; D1651
D1652	8-719-948-31	DIODE LD-201VR
	*4-201-076-01	HOLDER, LED; D1652
D1654	8-719-948-31	DIODE LD-201VR
	*4-201-076-01	HOLDER, LED; D1654

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
H2-2	*1-568-882-51	PIN, CONNECTOR 7P

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC1651	8-741-101-75	IC SBX1610-11

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			
R1662	1-249-413-11	CARBON	470	5%	1/4W

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*1-638-391-11 H1 BOARD (KV-C2161D,C2961D)
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*1-638-744-11 H1 BOARD (KV-C2561D)
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C1651	1-102-106-00	CERAMIC	100PF	10%	50V	
C1652	1-102-106-00	CERAMIC	100PF	10%	50V	
C1653	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C1655	1-102-074-00	CERAMIC	0.001MF	10%	50V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
H1-1	*1-568-881-51	PIN, CONNECTOR 6P
H1-02	1-568-678-11	TERMINAL BLOCK, S 3P
H1-4	*1-568-879-51	PIN, CONNECTOR 4P
H1-05	1-562-837-11	JACK
H1-23	*1-568-879-51	PIN, CONNECTOR 4P
H1-26	*1-568-877-51	PIN, CONNECTOR 2P (KV-C2961D)
H1-43	*1-564-512-11	PLUG, CONNECTOR 9P

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			
R1651	1-249-413-11	CARBON	470	5%	1/4W
R1652	1-249-413-11	CARBON	470	5%	1/4W

<SWITCH>

REF.NO.	PART NO.	DESCRIPTION
S1651	1-571-532-21	SWITCH, TACTIL
S1652	1-571-532-21	SWITCH, TACTIL
S1653	1-571-532-21	SWITCH, TACTIL

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*A-1651-018-A J1 BOARD, COMPLETE (KV-C2161D)
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*A-1651-023-A J1 BOARD, COMPLETE (KV-C2561D)
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*A-1651-038-A J1 BOARD, COMPLETE (KV-C2961D)
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			
C203	1-124-925-11	ELECT	2.2MF	20%	50V
C205	1-124-927-11	ELECT	4.7MF	20%	50V
C206	1-124-925-11	ELECT	2.2MF	20%	50V
C207	1-124-927-11	ELECT	4.7MF	20%	50V
C213	1-126-233-11	ELECT	22MF	20%	50V
C214	1-137-045-11	FILM	0.0068MF	10%	400V
C217	1-137-045-11	FILM	0.0068MF	10%	400V
C218	1-137-102-11	FILM	0.022MF	10%	250V
C219	1-137-102-11	FILM	0.022MF	10%	250V
C220	1-108-686-11	MYLAR	0.0033MF	10%	100V
C221	1-108-686-11	MYLAR	0.0033MF	10%	100V
C222	1-137-095-11	FILM	0.056MF	10%	100V
C223	1-137-095-11	FILM	0.056MF	10%	100V
C224	1-137-047-11	FILM	0.01MF	10%	400V
C225	1-136-173-00	FILM	0.47MF	5%	50V
C226	1-136-173-00	FILM	0.47MF	5%	50V
C227	1-137-102-11	FILM	0.022MF	10%	250V
C228	1-137-104-11	FILM	0.033MF	10%	250V
C229	1-137-049-11	FILM	0.015MF	10%	400V
C230	1-137-049-11	FILM	0.015MF	10%	400V
C231	1-124-902-00	ELECT	0.47MF	20%	50V
C232	1-124-907-11	ELECT	10MF	20%	50V
C233	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C234	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C235	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C236	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C237	1-124-902-00	ELECT	0.47MF	20%	50V
C238	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C239	1-126-103-11	ELECT	470MF	20%	16V
C240	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V
C241	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C242	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C243	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C244	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C245	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C1401	1-124-907-11	ELECT	10MF	20%	50V
C1402	1-126-103-11	ELECT	470MF	20%	16V
C1403	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C1404	1-137-098-11	FILM	0.1MF	10%	100V
C1405	1-163-029-11	CERAMIC CHIP	0.0047MF		50V
C1406	1-137-098-11	FILM	0.1MF	10%	100V
C1407	1-124-910-11	ELECT	47MF	20%	50V
C1408	1-124-122-11	ELECT	100MF	20%	50V
C1409	1-126-233-11	ELECT	22MF	20%	50V
C1410	1-124-907-11	ELECT	10MF	20%	50V
C1411	1-124-907-11	ELECT	10MF	20%	50V
C1412	1-124-910-11	ELECT	47MF	20%	50V
C1413	1-124-910-11	ELECT	47MF	20%	50V
C1414	1-124-907-11	ELECT	10MF	20%	50V
C1415	1-137-098-11	FILM	0.1MF	10%	100V
C1416	1-137-098-11	FILM	0.1MF	10%	100V
C1417	1-124-120-11	ELECT	220MF	20%	16V
C1418	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C1419	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C1425	1-124-902-00	ELECT	0.47MF	20%	50V
C1426	1-124-902-00	ELECT	0.47MF	20%	50V
C1427	1-163-029-11	CERAMIC CHIP	0.0047MF		50V
C1428	1-163-029-11	CERAMIC CHIP	0.0047MF		50V
C1429	1-163-029-11	CERAMIC CHIP	0.0047MF		50V
C1430	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C1431	1-126-529-11	ELECT	0.47MF	20%	50V
C1432	1-124-902-00	ELECT	0.47MF	20%	50V
C1433	1-124-122-11	ELECT	100MF	20%	50V
C1436	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1437	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1438	1-137-047-11	FILM	0.01MF	10%	400V
C1439	1-137-047-11	FILM	0.01MF	10%	400V
C1440	1-124-907-11	ELECT	10MF	20%	50V
C1441	1-124-907-11	ELECT	10MF	20%	50V
C1442	1-137-098-11	FILM	0.1MF	10%	100V
C1443	1-137-098-11	FILM	0.1MF	10%	100V
C1444	1-124-910-11	ELECT	47MF	20%	50V
C1445	1-102-824-00	CERAMIC	470PF	5%	50V
C1446	1-102-824-00	CERAMIC	470PF	5%	50V
C1501	1-124-927-11	ELECT	4.7MF	20%	50V
C1502	1-124-903-11	ELECT	1MF	20%	50V
C1503	1-108-680-11	MYLAR	0.001MF	10%	100V
C1504	1-124-910-11	ELECT	47MF	20%	50V
C1505	1-137-094-11	FILM	0.047MF	10%	100V
C1507	1-108-686-11	MYLAR	0.0033MF	10%	100V
C1508	1-124-903-11	ELECT	1MF	20%	50V
C1509	1-124-903-11	ELECT	1MF	20%	50V
C1511	1-124-927-11	ELECT	4.7MF	20%	50V
C1512	1-137-045-11	FILM	0.0068MF	10%	400V (KV-C2161D,C2561D)
C1513	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C1514	1-137-102-11	FILM	0.022MF	10%	250V (KV-C2161D,C2561D)
C1515	1-102-117-00	CERAMIC	820PF	10%	50V (KV-C2161D,C2561D)

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CN1401	1-565-838-11	JACK BLOCK, PIN 2P
J1-41	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P
J1-43	*1-564-524-11	PLUG, CONNECTOR 9P
J1-44	*1-564-527-11	PLUG, CONNECTOR 12P
J1-51	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D201	8-719-110-14	DIODE RD9.1ES-B3	
D202	8-719-110-14	DIODE RD9.1ES-B3	
D205	8-719-110-03	DIODE RD7.5ES-B2	
D206	8-719-110-03	DIODE RD7.5ES-B2	
D1401	8-719-110-03	DIODE RD7.5ES-B2	
D1403	8-719-110-03	DIODE RD7.5ES-B2	
D1404	8-719-110-03	DIODE RD7.5ES-B2	
D1405	8-719-110-03	DIODE RD7.5ES-B2	
D1406	8-719-110-03	DIODE RD7.5ES-B2	
D1407	8-719-921-77	DIODE MTZN-10C	
D1408	8-719-110-14	DIODE RD9.1ES-B3	
D1409	8-719-110-14	DIODE RD9.1ES-B3	
D1410	8-719-110-14	DIODE RD9.1ES-B3	
D1415	8-719-110-03	DIODE RD7.5ES-B2	
D1418	8-719-110-03	DIODE RD7.5ES-B2	
D1419	8-719-110-03	DIODE RD7.5ES-B2	
D1420	8-719-110-03	DIODE RD7.5ES-B2	
D1421	8-719-110-03	DIODE RD7.5ES-B2	
D1422	8-719-110-03	DIODE RD7.5ES-B2	
D1423	8-719-110-03	DIODE RD7.5ES-B2	
D1424	8-719-110-03	DIODE RD7.5ES-B2	
D1425	8-719-110-03	DIODE RD7.5ES-B2	
D1426	8-719-110-03	DIODE RD7.5ES-B2	
D1501	8-719-300-33	DIODE RU-3AM	
D1502	8-719-911-19	DIODE 1SS119	
D1503	8-719-911-19	DIODE 1SS119	
D1504	8-719-911-19	DIODE 1SS119	
D1505	8-719-911-19	DIODE 1SS119	
D1506	8-719-982-33	DIODE MTZJ-36D	
D1507	8-719-911-19	DIODE 1SS119	
D1510	8-719-911-19	DIODE 1SS119	

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC201	8-759-013-17	IC TDA6200
IC1401	8-752-032-27	IC CXA1114P
IC1402	8-759-946-32	IC TEA2014A
IC1403	8-759-140-53	IC UPD4053BC
IC1501	8-759-942-16	IC TEA2031A

<JACK>

REF.NO.	PART NO.	DESCRIPTION
J1402	1-561-534-41	SOCKET 21P
J1403	1-561-534-41	SOCKET 21P

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION
Q201	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q202	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q1401	8-729-216-22	TRANSISTOR 2SA1162-G
Q1402	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q1403	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q1404	8-729-216-22	TRANSISTOR 2SA1162-G

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
R201	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R202	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W

J1

REF.NO.	PART NO.	DESCRIPTION				REMARK
R203	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R204	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R205	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R206	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R207	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R208	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R209	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R210	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R211	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R212	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R213	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R214	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R215	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R216	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R217	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R218	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R219	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R220	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R221	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R222	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R223	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R224	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R225	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R226	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R227	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R228	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R229	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R230	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R231	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R232	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R233	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R234	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R235	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R236	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R240	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R241	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R242	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R243	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R244	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R245	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R246	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R247	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R248	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R249	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R250	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1400	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1401	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1402	1-216-170-00	METAL GLAZE	68	5%	1/8W	
R1403	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1404	1-216-178-00	METAL GLAZE	150	5%	1/8W	
R1405	1-249-434-11	CARBON	27K	5%	1/4W	
R1407	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1408	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1409	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1410	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1411	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1412	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1413	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1414	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1415	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1416	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1417	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1418	1-247-738-11	CARBON	82	5%	1/2W	F
R1419	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1420	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1421	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1422	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1423	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1424	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1425	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1426	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1427	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1428	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1429	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1430	1-216-170-00	METAL GLAZE	68	5%	1/8W	
R1431	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1432	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1433	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1434	1-249-393-11	CARBON	10	5%	1/4W	F
R1437	1-249-434-11	CARBON	27K	5%	1/4W	
R1440	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1441	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1442	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1443	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1444	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1445	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R1446	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1447	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1448	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1449	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1452	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1453	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1454	1-216-180-00	METAL GLAZE	180	5%	1/8W	
R1455	1-216-180-00	METAL GLAZE	180	5%	1/8W	
R1457	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1459	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1460	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1461	1-216-190-00	METAL GLAZE	470	5%	1/8W	
R1462	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1463	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1464	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R1465	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1466	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1467	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1468	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1469	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1470	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1471	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1472	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1473	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1474	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1476	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1477	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1478	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1480	1-216-190-00	METAL GLAZE	470	5%	1/8W	
R1482	1-216-178-00	METAL GLAZE	150	5%	1/8W	
R1483	1-216-178-00	METAL GLAZE	150	5%	1/8W	
R1484	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1485	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1486	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1487	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1488	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1489	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1501	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1502	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R1503	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1504	1-216-085-00	METAL GLAZE	33K	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1505	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1506	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1509	1-216-105-00	METAL GLAZE	220K	5%	1/10W	
R1510	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1511	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1512	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1513	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R1514	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1515	1-216-117-00	METAL GLAZE	680K	5%	1/10W	(KV-C2161D,C2561D)
R1516	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R1517	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1519	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R1520	1-216-113-00	METAL GLAZE	470K	5%	1/10W	(KV-C2161D,C2561D)
	1-216-111-00	METAL GLAZE	390K	5%	1/10W	(KV-C2961D)
R1521	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R1550	1-216-349-00	METAL OXIDE	1	5%	1W	F (KV-C2961D)
R1556	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION
RV1501	1-238-023-11	RES, ADJ, CARBON 470K
RV1502	1-238-016-11	RES, ADJ, CARBON 10K
RV1503	1-238-017-11	RES, ADJ, CARBON 22K
RV1504	1-238-012-11	RES, ADJ, CARBON 1K
RV1505	1-238-023-11	RES, ADJ, CARBON 470K
RV1506	1-238-017-11	RES, ADJ, CARBON 22K
RV1507	1-238-009-11	RES, ADJ, CARBON 220
RV1508	1-238-016-11	RES, ADJ, CARBON 10K
RV1509	1-238-023-11	RES, ADJ, CARBON 470K

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*A-1654-004-A IFG BOARD, COMPLETE (KV-C2161D)
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*A-1654-005-A IFG BOARD, COMPLETE (KV-C2561D)
****

*A-1654-008-A IFG BOARD, COMPLETE (KV-C2961D)
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			
C1	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C2	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C4	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C6	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C7	1-124-903-11	ELECT	1MF	20%	50V
C8	1-124-907-11	ELECT	10MF	20%	50V
C9	1-130-471-00	MYLAR	0.001MF	5%	50V
C10	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C11	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C12	1-136-298-00	FILM	0.0033MF	2%	100V
C13	1-124-477-11	ELECT	47MF	20%	16V
C14	1-124-477-11	ELECT	47MF	20%	16V
C15	1-124-477-11	ELECT	47MF	20%	16V
C16	1-124-477-11	ELECT	47MF	20%	16V
C17	1-124-907-11	ELECT	10MF	20%	50V
C18	1-137-047-11	FILM	0.01MF	10%	400V
C19	1-137-047-11	FILM	0.01MF	10%	400V
C20	1-126-233-11	ELECT	22MF	20%	50V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C21	1-126-233-11	ELECT	22MF	20%	50V
C22	1-137-098-11	FILM	0.1MF	10%	100V
C23	1-137-031-11	FILM	0.22MF	10%	100V
C24	1-124-034-51	ELECT	33MF	20%	16V
C25	1-137-102-11	FILM	0.022MF	10%	250V
C26	1-137-094-11	FILM	0.047MF	10%	100V
C27	1-124-903-11	ELECT	1MF	20%	50V
C28	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C29	1-124-903-11	ELECT	1MF	20%	50V
C30	1-124-903-11	ELECT	1MF	20%	50V
C31	1-137-047-11	FILM	0.01MF	10%	400V
C32	1-130-479-00	MYLAR	0.0047MF	5%	50V
C33	1-163-081-00	CERAMIC CHIP	0.22MF		25V
C34	1-137-031-11	FILM	0.22MF	10%	100V
C35	1-124-907-11	ELECT	10MF	20%	50V
C36	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C37	1-124-477-11	ELECT	47MF	20%	16V
C38	1-124-477-11	ELECT	47MF	20%	16V
C39	1-163-133-00	CERAMIC CHIP	470PF	5%	50V

<FILTER>

CDA1	1-404-751-11	DISCRIMINATOR, CERAMIC
CDA2	1-404-750-11	DISCRIMINATOR, CERAMIC
SFT1	1-527-840-00	FILTER, CERAMIC
SFT2	1-527-839-00	FILTER, CERAMIC

<DIODE>

D3	8-719-400-18	DIODE MA152WK

<IC>

IC1	8-759-003-90	IC TBA129
IC2	8-759-003-90	IC TBA129
IC3	8-759-030-48	IC TDA6600-2
IC4	8-759-513-48	IC TDA2595/V9

<CONNECTOR>

IFG13	*1-565-488-11	CONNECTOR, BOARD TO BOARD 12P

<COIL>

L1	1-408-410-00	INDUCTOR	12UH
L2	1-408-410-00	INDUCTOR	12UH
L3	1-410-064-11	INDUCTOR	2.7MMH
L4	1-408-421-00	INDUCTOR	100UH
L5	1-408-421-00	INDUCTOR	100UH

<TRANSISTOR>

Q2	8-729-901-00	TRANSISTOR DTC124EK
Q3	8-729-216-22	TRANSISTOR 2SA1162-G
Q4	8-729-901-00	TRANSISTOR DTC124EK

<RESISTOR>

JR8	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR10	1-216-296-00	METAL GLAZE	0	5%	1/8W
R1	1-216-045-00	METAL GLAZE	680	5%	1/10W
R2	1-216-043-00	METAL GLAZE	560	5%	1/10W
R3	1-216-043-00	METAL GLAZE	560	5%	1/10W
R5	1-216-045-00	METAL GLAZE	680	5%	1/10W
R6	1-216-043-00	METAL GLAZE	560	5%	1/10W

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
R7	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R9	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R11	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
R12	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R13	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R15	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R16	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R17	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R18	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
R19	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R20	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R22	1-216-099-00	METAL GLAZE 120K 5% 1/10W	
R24	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R25	1-216-077-00	METAL GLAZE 15K 5% 1/10W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV1	1-238-016-11	RES, ADJ, CARBON 10K	
RV2	1-238-019-11	RES, ADJ, CARBON 47K	

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MISCELLANEOUS

REF.NO.	PART NO.	DESCRIPTION	REMARK
	⚠1-426-383-11	COIL, DEMAGNETIZATION (KV-C2161D)	
	⚠1-426-372-11	COIL, DEMAGNETIZATION (KV-C2561D)	
	⚠1-426-398-11	COIL, DEMAGNETIZATION (KV-C2961D)	
	⚠1-451-295-11	DEFLECTION YOKE (Y21PFA2) (KV-C2161D)	
	⚠1-451-311-21	DEFLECTION YOKE (Y25FXA) (KV-C2561D)	
	⚠1-451-313-21	DEFLECTION YOKE (Y29FXA) (KV-C2961D)	
	1-452-032-00	MAGNET, DISK; 10MM ϕ	
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
	1-452-277-00	MAGNET, BMC (KV-C2161D)	
	⚠1-452-509-42	NECK ASSY, PICTURE TUBE (NA-308) (KV-C2961D)	
	1-544-525-11	SPEAKER (KV-C2161D)	
	1-504-146-11	SPEAKER (5X11CM) (KV-C2561D,C2961D)	
	⚠1-590-501-11	CORD, POWER (WITH NOISE FILTER)	
V901	⚠8-738-758-05	PICTURE TUBE (A51JXH61X) (KV-C2161D)	
	⚠8-733-231-05	PICTURE TUBE (A59JWC61X) (KV-C2561D)	
	⚠8-733-831-05	PICTURE TUBE (A68JYL61X) (KV-C2961D)	

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ACCESSORIES AND PACKING MATERIALS

REF.NO.	PART NO.	DESCRIPTION	REMARK
	3-755-462-11	MANUAL, INSTRUCTION (GERMAN/ENGLISH/FRENCH/DUTCH/ITALIAN/PORTUGUESE) (KV-C2161D)	
	*4-033-049-01	CUSHION (LOWER) (ASSY) (KV-C2161D)	
	*4-033-050-01	CUSHION (UPPER) (ASSY) (KV-C2161D)	
	*4-033-051-01	INDIVIDUAL CARTON (KV-C2161D)	
	*4-380-340-01	BAG, PROTECTION (KV-C2161D)	
	*4-202-040-01	INDIVIDUAL CARTON (KV-C2561D)	
	*4-202-041-01	CUSHION (UPPER) (ASSY) (KV-C2561D)	
	*4-202-042-01	CUSHION (LOWER) (ASSY) (KV-C2561D)	
	4-200-974-11	MANUAL, INSTRUCTION (GERMAN/ENGLISH/FRENCH/DUTCH/ITALIAN/PORTUGUESE) (KV-C2561D)	
	*4-396-065-01	BAG, PROTECTION (KV-C2561D)	
	*4-202-005-01	INDIVIDUAL CARTON (KV-C2961D)	
	*4-202-006-01	CUSHION (UPPER) (ASSY) (KV-C2961D)	
	*4-202-009-01	CUSHION (BOTTOM) (KV-C2961D)	
	4-200-973-11	MANUAL, INSTRUCTION (GERMAN/ENGLISH/FRENCH/DUTCH/ITALIAN/PORTUGUESE) (KV-C2961D)	
	*4-384-027-01	BAG, PROTECTION (KV-C2961D)	

REMOTE COMMANDER

REF.NO.	PART NO.	DESCRIPTION	REMARK
	1-465-796-11	CONTROL UNIT, REMOTE (RM-816)	
	4-031-670-01	COVER, POCKET (FOR RM-816)	

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TV Group

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